other baffles, an intermediate, interlocking but not solid barrier in the interior of the wall module." App. at 118 (emphasis added).

The district court's claim construction order included numerous findings of fact about the state of the art at the time of the invention. *See* App. at 91-92. Similarly, the district court evaluated the testimony regarding the use of terms by those of skill in the art. For example, the district court's claim construction was based in part on its construction of the disputed term "impact resistant." Rejecting Phillips' contention that "impact resistant" is a term of art used in the Model Building Code, the court turned to the intrinsic evidence contained in the specification to determine that the term refers to resistance to the impact of bullets, exploding projectiles or bomb fragments. In reaching this construction, the court considered and rejected the testimonial evidence offered by Phillips:

> Although the inventor and expert witnesses testified that the bullet penetration may not be the impact ordinarily associated with prisons, their testimony is disregarded in deference to the clear statement in the Specification that the invention's impact resistance feature pertains to bullets and exploding projectiles.

App. at 106.

After the district court issued its claim construction order, the parties agreed that AWH's modules did not infringe the claims of the '798 patent as they had been construed by the district court. The district court therefore entered summary judgment of non-infringement in favor of AWH.

B. Proceedings In The Federal Circuit

1. Review By The Federal Circuit Panel

Phillips appealed the district court's summary judgment of non-infringement to a panel of the Federal Circuit. The panel reviewed the district court's claim construction *de novo*, pursuant to the Federal Circuit's prior ruling in *Cybor Corp.* v. *FAS Techs., Inc.*, 138 F.3d 1448, 1456 (Fed. Cir. 1998) (en banc). Although the panel disagreed with some of the district court's analysis, the panel affirmed the district court's ultimate construction of "baffle" in the '798 patent as being a steel structure oriented at angles other than 90° to the wall faces and forming an intermediate barrier. Because the panel agreed with the district court's claim construction, it affirmed the summary judgment of non-infringement.

2. The Federal Circuit's Order Granting Rehearing *En Banc*, Requesting Briefing On The Applicable Standard Of Review, And Inviting Amicus Participation

Phillips filed a timely petition for rehearing *en banc* in the Federal Circuit. The Federal Circuit granted Phillips' petition for rehearing *en banc*, posed seven questions that it sought to resolve, and invited participation by *amici curiae*. Questions 1 through 6 dealt with the mechanics of claim construction and the relative priority that should be given to various sources of intrinsic and extrinsic evidence. Question 7 addressed the proper standard of review:

> This court has determined to hear this case *en banc* in order to resolve issues concerning the construction of patent claims raised by the now-vacated panel majority and dissenting opinions. The parties are invited to submit additional

> briefs directed to these issues, with respect particularly to the following questions:
>
> . . .
>
> 7. Consistent with the Supreme Court's decision in *Markman* v. *Westview Instruments, Inc.*, 517 U.S. 370 (1996), and our *en banc* decision in *Cybor Corp.* v. *FAS Technologies, Inc.*, 138 F.3d 1448 (Fed. Cir. 1998), is it appropriate for this court to accord any deference to any aspect of trial court claim construction rulings? If so, on what aspects, in what circumstances, and to what extent?
>
> . . .
>
> *Amicus curiae* briefs may be filed by bar associations, trade or industry associations, government entities, and other interested parties. In particular, the United States Patent and Trademark Office is invited to submit an *amicus curiae* brief.

App. at 137-40.

In response to the *en banc* court's invitation, both parties argued that the Federal Circuit should afford some deference to a district court's claim construction. In addition, thirty-three groups filed *amicus* briefs. Of the twenty-three that took a position on Question 7, all but six urged the Federal Circuit to at least acknowledge the factual components of claim construction and accord deference to district courts on such components. Those supporting a deferential review of claim construction included the American Bar Association, the American Intellectual Property Law Association, the Federal Circuit Bar Association, the Intellectual Property Owners Association and the United States Patent and Trademark Office ("USPTO").

The USPTO, with the express support of the Department of Justice and the Federal Trade Commission, urged the Federal Circuit to give deference on appeal to most aspects of a trial court's claim construction. Citing the United States' "strong interest in a fair, stable, predictable, and efficient patent system," the USPTO stated that "[t]he uncertainty resulting from [the Federal Circuit's] high reversal rate on claim construction has generated concern." The USPTO therefore urged the Federal Circuit to give "due consideration to a persuasive claim construction by the district court and accord[] due weight to its evaluation of any live testimony on this issue."

3. The *En Banc* Majority Opinion

After inviting and receiving substantial briefing on the issue of the proper standard of appellate review, the majority of the *en banc* Federal Circuit ultimately sidestepped it: "After consideration of the matter, we have decided not to address that issue at this time." App. at 50-51. Because the *en banc* majority chose to disregard the issue, it left the rule of universal *de novo* review in place by default, saying: "We therefore leave undisturbed our prior en banc decision in *Cybor*." App. at 51.

The majority then proceeded to apply *de novo* – on appeal – the new rules of claim construction it had crafted and reversed the ruling of the district court in favor of AWH. The *en banc* majority did not remand the case to the district court for application of the principles or analyze whether the district court had, in fact, followed those principles in its claim construction analysis. Instead, it applied those principles itself to the '798 patent. Contrary to the district court's and the panel's construction of "baffle" in the '798 patent, the *en banc* majority concluded

that "a person of skill in the art would not interpret the disclosure and claims of the '798 patent to mean that a structure extending inward from one of the wall faces is a 'baffle' if it is at an acute or obtuse angle, but is not a 'baffle' if it is disposed at a right angle." App. at 47.

4. Judge Mayer's Dissenting Opinion

Judge Mayer, joined by Judge Newman, filed a dissenting opinion that focused directly on the issue of the proper standard of review:

> Now more than ever I am convinced of the futility, indeed the absurdity, of this court's persistence in adhering to the falsehood that claim construction is a matter of law devoid of any factual component. Because any attempt to fashion a coherent standard under this regime is pointless, as illustrated by our many failed attempts to do so, I dissent.

App. at 54.

Judge Mayer further decried his own court's "[persistence] in the delusion that claim construction is a purely legal determination, unaffected by the underlying facts." App. at 58. To deny the factual components of claim construction was, according to Judge Mayer, to ignore the reality that claim construction "is, or should be, made in context: a claim should be interpreted both from the perspective of one of ordinary skill in the art and in view of the state of the art at the time of the invention." *Id.* These inquiries are "inherently factual." *Id.* Indeed, the claim construction process includes a great number of inherently factual inquiries, including:

- who qualifies as one of ordinary skill in the art
- the meaning of patent terms to that person
- the state of the art at the time of the invention
- contradictory dictionary definitions and which would be consulted by the skilled artisan
- the scope of specialized terms
- the problem a patent was solving
- what is related or pertinent art
- whether a construction was disallowed during prosecution.

Id.

Because factual inquiries are inherent in the claim construction process, Judge Mayer criticized the *en banc* majority for failing to comply with Federal Rule of Civil Procedure 52(a), which states that "findings of fact ... shall not be set aside unless clearly erroneous, and due regard shall be given to the opportunity of the trial court to judge the credibility of the witnesses." App. at 55-57. As this Court stated in *Bose Corp.* v. *Consumers Union of United States*, 466 U.S. 485, 498 & 501 (1984), Rule 52(a) "means what it says." App. at 56.

REASONS FOR GRANTING THE PETITION

Over ten years ago, the Federal Circuit held that "the interpretation and construction of patent claims, which define the scope of a patentee's rights under the patent, is a matter of law exclusively for the court." *Markman* v. *Westview Instruments, Inc.*, 52 F.3d 897 (Fed. Cir. 1995) ("*Markman I*"), *aff'd in part*, 517 U.S. 370 (1996) ("*Markman II*"). Three years later, further solidifying its place as the final arbiter of all things related to claim construction, the Federal Circuit announced that it was permitted to "review claim construction *de novo* on appeal including any *allegedly fact-based questions*." *Cybor*, 138 F.3d at 1456 (emphasis added).

The Federal Circuit's rule of universal *de novo* review for patent claim construction is founded on a fallacy and conflicts with both the Rules of Civil Procedure and this Court's precedents. The reality is that patent claim construction often and necessarily rests on findings of fact made by the trial court on disputed evidence. But, as the Federal Circuit's own Judge Mayer wrote, that court's rule of review rests on "the falsehood that claim construction is a matter of law devoid of any factual component." App. at 54. The Federal Circuit's persistent refusal to review trial courts' factual findings deferentially conflicts with Federal Rule of Civil Procedure 52(a), which requires deferential review on appeal for findings of fact. It also conflicts with the decisions of this Court, which have acknowledged that claim construction involves mixed questions of law and fact and have held that deferential review should be applied on appeal to factual findings in other circumstances of patent claim interpretation.

The Court should grant review of this important issue now. The issue is undoubtedly ripe for review, and it will not benefit from any further percolation in the lower

courts. The Federal Circuit has already addressed the issue in three *en banc* opinions, and it has maintained its erroneous position each time. The most recent time, in the opinion below, the *en banc* court expressly invited briefing on the issue, then not only failed to correct its position, but refused even to consider the issue. No further development will come from the Federal Circuit. Nor can any other circuit develop the issue, because appeals in patent cases are consolidated in the Federal Circuit. *See* 28 U.S.C. § 1295(a)(1).

The consequences of denying review, moreover, are severe. The 34.5% reversal rate in the Federal Circuit for appealed claim terms, *see* Moore, *Markman Eight Years Later: Is Claim Construction More Predictable?*, 9 LEWIS & CLARK L. REV. 231, 233 (2005), is three *times* greater than the usual reversal rate in the other circuits. Left to its own devices, the Federal Circuit will continue to improperly devote the chief measure of its energy to rejudging the facts of patent claim constructions, rather than to fulfilling its purpose of bringing uniformity to patent law. In addition, although the majority of judges in the Federal Circuit are unwilling to revisit their erroneous standard of review, the issue will continue to distract the court because individual litigants and judges – who keenly feel the consequences of the majority's mistaken position – will continue to ask and lobby for change.

A. The Federal Circuit's Insistence That Claim Construction Does Not Include Any Factual Issues Conflicts With This Court's Decisions In *Markman* And *Graham*.

This Court has already concluded that patent claim construction involves factual determinations, and the Federal Circuit's insistence to the contrary is in direct conflict with the Court's precedent. In *Graham* v. *John*

Deere Co., 383 U.S. 1 (1966), the Court directly acknowledged that the determination of what a patent teaches to one skilled in the art – an essential part of the claim construction analysis – is an issue of fact. As the Court stated, "While the ultimate question of patent validity is one of law," the determination of patent validity "lends itself to several basic factual inquiries [such as] the scope and content of the prior art . . . differences between the prior art and the claims at issue . . . and the level of ordinary skill in the pertinent art." *Id.* at 17. In *Markman II*, the Court likewise acknowledged that the claim construction process is a "mongrel practice" that has "evidentiary underpinnings." 517 U.S. at 378, 389. And the Court directly acknowledged that "[i]t is, of course, true that credibility judgments have to be made about the experts who testify in patent cases . . . ." *Id.* at 389.

Notwithstanding this Court's acknowledgment of the fact finding inherent in the claim construction process, the Federal Circuit in its *Cybor* decision simply dismissed this Court's statements as mere "prefatory comments" that need not limit the Federal Circuit's power. Unrestrained by the portions of *Markman II* it found limiting, the *Cybor* majority declared that claim construction is a "purely legal question," and therefore the court will "review claim construction *de novo* on appeal including any allegedly fact-based questions relating to claim construction." 138 F.3d at 1456. Here, the *en banc* opinion below affirms the Federal Circuit's approach and perpetuates a conflict with this Court's *Markman II* decision.

The Federal Circuit is incorrect in its belief that, because this Court ultimately concluded in *Markman II* that claim construction is an issue for judges rather than juries under the Seventh Amendment, there cannot be any

factual issues that are subject to deference on appeal. To the contrary, the Court's Seventh Amendment analysis openly acknowledges that the process of claim construction necessarily involves making findings of fact. The Court rejected reliance on any rigid fact/law distinction and instead based its holding on "functional considerations." 517 U.S. at 388. As the Court explained:

> [W]hen an issue "falls somewhere between a pristine legal standard and a simple historical fact, the fact/law distinction at times has turned on a determination that, as a matter of the sound administration of justice, one judicial actor is better positioned than another to decide the issue in question." So it turns out here, for judges, not juries, are better suited to find the acquired meaning of patent terms.

Id. at 388 (quoting *Miller* v. *Fenton*, 474 U.S. 104, 114 (1985)).

The same "functional considerations" that the Court applied in *Markman II* to conclude that judges rather than juries should decide the issue of claim construction support deferential appellate review of the judges' fact finding – because *trial* judges rather than *appellate* judges are better situated to evaluate and make findings based on the evidence. Indeed, it is the ordinary practice for appellate courts to accord deferential review to factual findings made by trial judges – even when those findings are embedded in questions of law that are themselves reviewed *de novo*. *See, e.g.*, *Ornelas* v. *United States*, 517 U.S. 690, 699 (1996); *Cooter & Gell* v. *Hartmarx Corp.*, 496 U.S. 384, 401-05 (1990); *Pierce* v. *Underwood*, 487 U.S. 552, 560-63 (1988).

B. The Federal Circuit's Application Of *De Novo* Review To The Factual Findings Underlying Claim Construction Conflicts With Federal Rule Of Civil Procedure 52(a) And This Court's Decisions Regarding Appellate Review Of Mixed Questions Of Law And Fact.

Since it cannot be disputed that the claims construction process involves factual findings, Federal Rule of Civil Procedure 52(a) mandates that appellate courts apply a deferential standard of review to those findings on appeal. The Federal Circuit's position of complete *de novo* review conflicts not only with the Rule, but with this Court's and the other circuit courts' consistent application of it.

Under Rule 52, determinations of fact based on extrinsic physical or documentary evidence are given deference even where the appellate court has equal access to the evidence, since appellate review of findings of fact under a clearly erroneous standard "is the rule, not the exception":

> This is so even when the district court's findings do not rest on credibility determinations, but are based instead on physical or documentary evidence or inferences from other facts. . . . Rule 52(a) "does not make exceptions or purport to exclude certain categories of factual findings from the obligation of a court of appeals to accept a district court's findings unless clearly erroneous."

Anderson v. *Bessemer City*, 470 U.S. 564, 574 (1985) (quoting *Pullman-Standard* v. *Swint*, 456 U.S. 273, 287 (1982)).

This Court has already applied Rule 52 in another context of patent law to hold that subsidiary supporting

facts are reviewed for clear error, even when the ultimate issue is one of law. Specifically, the Court held in *Dennison Mfg. Co.* v. *Panduit Corp.*, 475 U.S. 809 (1986), that a trial court's fact findings in connection with a patent validity analysis under 35 U.S.C. § 103 are reviewed for "clear error." As the Court explained, "whether or not the ultimate question of obviousness is a question of fact subject to Rule 52(a), the subsidiary determinations of the District Court, at the least, ought to be subject to the Rule." 475 U.S. at 811.

The Court's holding in *Dennison* is fully consistent with its approach to deferential review generally. Even where determinations of mixed questions of law and fact receive *de novo* review, deference is given to the trial court's findings of fact and reasonable inferences:

> [D]eterminations of reasonable suspicion and probable cause should be reviewed *de novo* on appeal. Having said this, we hasten to point out that a reviewing court should take care both to review findings of historical fact only for clear error and to give due weight to inferences drawn from those facts by resident judges and local law enforcement officers.

Ornelas v. *United States*, 517 U.S. 690, 699 (1996).

Sometimes, functional considerations of the institutional strengths of trial and appellate courts leads the Court to apply deferential review even to the ultimate issues. *See, e.g., Salve Regina College* v. *Russell*, 499 U.S. 225, 233 (1991) (holding that "deferential review of mixed questions of law and fact is warranted when it appears that the district court is 'better positioned' than the appellate court to decide the issue in question or that probing

appellate scrutiny will not contribute to the clarity of legal doctrine."); *see also First Options of Chicago, Inc.* v. *Kaplan*, 514 U.S. 938, 948 (1995) (explaining that "the reviewing attitude that a court of appeals takes toward a district court decision should depend upon the respective institutional advantages of trial and appellate courts."). The regional circuit courts have similarly applied a deferential standard based upon "reasonableness" in various circumstances where *de novo* review might otherwise be applied. *See Reed* v. *R.R. Ret. Bd.*, 145 F.3d 373, 375 (D.C. Cir. 1998) ("If the contractual language is ambiguous . . . we will defer to an agency's reasonable interpretation."); *NLRB* v. *C.K. Smith & Co.*, 569 F.2d 162, 167 (1st Cir. 1977) (deferring to administrative agency interpretation that had a "reasonable basis in the contract terms"). In such instances, the circuit courts recognize that deference is appropriate based upon a recognition of the institutional advantages of the lower tribunals. *See Kansas Cities* v. *FERC*, 723 F.2d 82, 87 (D.C. Cir. 1983) ("Whether interpretation of [the relevant documents] raises an issue of law or an issue of fact, we would be foolish not to accord great weight to the judgment of the expert agency that deals with agreements of this sort on a daily basis.") (internal citations omitted); *see also National Fuel Gas Supply Corp.* v. *FERC*, 811 F.2d 1563, 1569 (D.C. Cir. 1987).

This Court and the regional circuits all recognize that pure questions of law are subject to *de novo* review while findings of fact are reviewed for clear error under Rule 52(a). Moreover, mixed questions of law and fact, like patent claim construction, are entitled to deference based largely on the institutional competence and administrative efficiency of the trial court. The Federal Circuit's current

no-deference practice flies in the face of this extensive precedent. Without any reasonable justification, the Federal Circuit has retained for itself complete *de novo* review of all claim construction issues including those findings which should be afforded appropriate deference. The Court should grant review to bring the Federal Circuit practice in line with the greater body of law.

C. The Issue Of The Proper Standard Of Deference On Appeal Is Ripe For Review By This Court.

The issue of the proper standard of review for patent claim construction will be developed no further. The Federal Circuit, patent litigation practitioners, and scholars have addressed the issue to the fullest extent possible. All that remains is for this Court to articulate the appropriate standard.

Three times over the last 10 years, the Federal Circuit has assembled itself *en banc* and stated categorically that it owes no deference to the federal trial courts in connection with determinations of patent claim construction. In every instance there have been substantial dissents. The severe disagreements revealed in the majority and dissenting opinions below prove that there is no more that the judges of the Federal Circuit can say to each other to resolve this issue. More time for reasoned consideration of the issues will not result in a natural resolution of the disagreements.

Moreover, the Federal Circuit cannot be expected to voluntarily relinquish its self-granted power of unrestricted review. After presenting itself with the opportunity to do so by calling for briefing by the parties and *amici* on this issue, it offered the intellectually dishonest

explanation that it had decided "not to address the issue at this time." It did address the issue and, with the exception of the vocal dissent by Judge Mayer, came down on the side of retaining the power it has carved out for itself in the area of claim construction.

Ample time has passed for scholars and commentators to fully illuminate the issue. The first article on this subject appeared shortly after *Cybor* was decided. *See* Donald, R. Dunner & Howard A. Kwon, *Cybor Corp.* v. *FAS Technologies: The Final Say on Appellate Review of Claim Construction?*, 80 J. PAT. & TRADEMARK OFF. SOC'Y 481 (1998). Since that time, numerous articles have been written on the issue. *See, e.g.*, Staheli, Comment, *Deserved Deference: Reconsidering The De Novo Standard Of Review For Claim Construction*, 3 MARQ. INTELL. PROP. L. REV. 181 (1999); Rooklidge & Weil, *Judicial Hyperactivity: The Federal Circuit's Discomfort With Its Appellate Role*, 15 BERKELEY TECH. L.J. 725 (2000); Zura, *Looking For Fire Amidst The Smoke – Is The Federal Circuit Really Exceeding Its Appellate Authority In Patent Infringement Cases?*, 12 U. BALT. INTELL. PROP. L.J. 1 (2003); Burgess, Comment, *Simplicity At The Cost Of Clarity: Appellate Review Of Claim Construction And The Failed Promise of Cybor*, 153 U. PA. L. REV. 763 (2004); Moore, *Markman Eight Years Later: Is Claim Construction More Predictable?*, 9 LEWIS & CLARK L. REV. 231 (2005). The passage of time is not likely to enrich the body of scholarly work on this issue.

In 1985, the Advisory Committee explained the value of deferential review in connection with the amendment of Rule 52(a), and its explanation illustrates perfectly what has gone wrong in the Federal Circuit and why this Court

should intervene. The Committee stated, "To permit courts of appeals to share more actively in the fact-finding function would tend to undermine the legitimacy of the district courts in the eyes of litigants, multiply appeals by encouraging appellate retrial of some factual issues, and needlessly reallocate judicial authority." That is precisely what has occurred in the Federal Circuit. District courts are required to devote precious time to the substantial task of receiving and evaluating the evidence relevant to the claim construction process. Parties in patent cases must incur considerable costs presenting their cases to the district court, often through testimony from experts in the relevant field of art. At the end of this expensive and time-consuming process, armed with a meaningless claim construction opinion and a voluminous record, litigants engage in the real battle before the Federal Circuit. Limited to an appellate brief and a 15-minute oral argument before a panel of the Federal Circuit, and without the benefit of expert testimony, counsel must assist the panel members in putting themselves into the position of "one of ordinary skill" in whatever art may be implicated, understand the state of that art at the time of the invention from the skilled artisan's perspective, and properly construe the disputed claim terms. It is little wonder that the Federal Circuit's reversal rate on claim construction is so high.

D. This Case Is An Ideal Vehicle For Resolving The Issue.

The standard of review issue is squarely and meaningfully presented in this case, and the Federal Circuit's application of the *de novo* standard made a difference in the outcome for the parties. The district court began its

analysis by setting out its findings regarding the state of the art at the time of the invention. *See* App. at 91-92. Those findings guide and effect the court's ultimate claim construction. The *en banc* Federal Circuit, however, did not even discuss the district court's factual findings, let alone grant them deference. Instead, the *en banc* court admitted that it was merely substituting its own findings for those of the district court, suggesting that they would have withstood deferential review: "Because we disagree with the district court's claim construction, we reverse the summary judgment of noninfringement."

This case highlights the entrenched position of the *en banc* majority of the Federal Circuit on the issue of standard of review and presents an ideal vehicle for this Court to resolve the issue. Moreover, because the Federal Circuit received *amici* briefs, the case carries a rich record addressing the issue of standard of review, including the views of the USPTO. This case is an ideal vehicle through which the Court can address an issue of great importance to patent litigants and practitioners, and one that has, and will continue to have, undesirable implications for them.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted,

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EDWARD H. PHILLIPS, Plaintiff-Appellant, v. AWH CORPORATION, HOPEMAN BROTHERS, INC., and LOFTON CORPORATION, Defendants-Cross Appellants.

03-1269, -1286

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

2005 U.S. App. LEXIS 13954

July 12, 2005, Decided

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JUDGES: Before MICHEL, Chief Judge, NEWMAN, MAYER, LOURIE, CLEVENGER, RADER, SCHALL, BRYSON, GAJARSA, LINN, DYK, and PROST, Circuit Judges. Opinion for the court filed by Circuit Judge BRYSON, in which Chief Judge MICHEL and Circuit Judges CLEVENGER, RADER, SCHALL, GAJARSA, LINN, DYK, and PROST join; and in which Circuit Judge

LOURIE joins with respect to parts I, II, III, V, and VI; and in which Circuit Judge NEWMAN joins with respect to parts I, II, III, and V. Opinion concurring in part and dissenting in part filed by Circuit Judge LOURIE, in which Circuit Judge NEWMAN joins. Dissenting opinion filed by Circuit Judge MAYER, in which Circuit Judge NEWMAN joins.

OPINION BY: BRYSON

OPINION: BRYSON, Circuit Judge.

Edward H. Phillips invented modular, steel-shell panels that can be welded together to form vandalism-resistant walls. The panels are espec ally useful in building prisons because they are load-bearing and impact-resistant, while also insulating against fire and noise. Mr. Phillips obtained a patent on the invention, U.S. Patent No. 4,677,798 ("the '798 patent"), and he subsequently entered into an arrangement with AWH Corporation, Hopeman Brothers, Inc., and Lofton Corporation (collectively "AWH") to market and sell the panels. That arrangement ended in 1990. In 1991, however, Mr. Phillips received a sales brochure from AWH that suggested to him that AWH was continuing to use his trade secrets and patented technology without his consent. In a series of letters in 1991 and 1992, Mr. Phillips accused AWH of patent infringement and trade secret misappropriation. Correspondence between the parties regarding the matter ceased after that time.

In February 1997, Mr. Phillips brought suit in the United States District Court for the District of Colorado charging AWH with misappropriation of trade secrets and infringement of claims 1, 21, 22, 24, 25, and 26 of the '798 patent. Phillips v. AWH Corp., No. 97-N-212 (D. Colo.). The

district court dismissed the trade secret misappropriation claim as barred by Colorado's three-year statute of limitations.

With regard to the patent infringement issue, the district court focused on the language of claim 1, which recites "further means disposed inside the shell for increasing its load bearing capacity comprising internal steel baffles extending inwardly from the steel shell walls." The court interpreted that language as "a means . . . for performing a specified function," subject to 35 U.S.C. § 112, paragraph 6, which provides that such a claim "shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." Looking to the specification of the '798 patent, the court noted that "every textual reference in the Specification and its diagrams show baffle deployment at an angle other than 90 [degree] to the wall faces" and that "placement of the baffles at such angles creates an intermediate interlocking, but not solid, internal barrier." The district court therefore ruled that, for purposes of the '798 patent, a baffle must "extend inward from the steel shell walls at an oblique or acute angle to the wall face" and must form part of an interlocking barrier in the interior of the wall module. Because Mr. Phillips could not prove infringement under that claim construction, the district court granted summary judgment of noninfringement.

Mr. Phillips appealed with respect to both the trade secret and patent infringement claims. A panel of this court affirmed on both issues. *Phillips v. AWH Corp.*, 363 F.3d 1207 (Fed. Cir. 2004). As to the trade secret claim, the panel unanimously upheld the district court's ruling that the claim was barred by the applicable statute of limitations. *Id.* at 1215. As to the patent infringement claims,

the panel was divided. The majority sustained the district court's summary judgment of noninfringement, although on different grounds. The dissenting judge would have reversed the summary judgment of noninfringement.

The panel first determined that because the asserted claims of the '798 patent contain a sufficient recitation of structure, the district court erred by construing the term "baffles" to invoke the "means-plus-function" claim format authorized by section 112, paragraph 6. *Id.* at 1212. Nonetheless, the panel concluded that the patent uses the term "baffles" in a restrictive manner. Based on the patent's written description, the panel held that the claim term "baffles" excludes structures that extend at a 90 degree angle from the walls. The panel noted that the specification repeatedly refers to the ability of the claimed baffles to deflect projectiles and that it describes the baffles as being "disposed at such angles that bullets which might penetrate the outer steel panels are deflected." '798 patent, col. 2, ll. 13-15; *see also id.* at col. 5, ll. 17-19 (baffles are "disposed at angles which tend to deflect the bullets"). In addition, the panel observed that nowhere in the patent is there any disclosure of a baffle projecting from the wall at a right angle and that baffles oriented at 90 degrees to the wall were found in the prior art. Based on "the specification's explicit descriptions," the panel concluded "that the patentee regarded his invention as panels providing impact or projectile resistance and that the baffles must be oriented at angles other than 90 [degree]." *Phillips*, 363 F.3d at 1213. The panel added that the patent specification "is intended to support and inform the claims, and here it makes it unmistakably clear that the invention involves baffles angled at other than 90

[degree]." *Id.* at 1214. The panel therefore upheld the district court's summary judgment of noninfringement.

The dissenting judge argued that the panel had improperly limited the claims to the particular embodiment of the invention disclosed in the specification, rather than adopting the "plain meaning" of the term "baffles." The dissenting judge noted that the parties had stipulated that "baffles" are a "means for obstructing, impeding, or checking the flow of something," and that the panel majority had agreed that the ordinary meaning of baffles is "something for deflecting, checking, or otherwise regulating flow." *Phillips*, 363 F.3d at 1216-17. In the dissent's view, nothing in the specification redefined the term "baffles" or constituted a disclaimer specifically limiting the term to less than the full scope of its ordinary meaning. Instead, the dissenting judge contended, the specification "merely identifies impact resistance as one of several objectives of the invention." *Id.* at 1217. In sum, the dissent concluded that "there is no reason to supplement the plain meaning of the claim language with a limitation from the preferred embodiment." *Id.* at 1218. Consequently, the dissenting judge argued that the court should have adopted the general purpose dictionary definition of the term baffle, i.e., "something for deflecting, checking, or otherwise regulating flow," *id.*, and therefore should have reversed the summary judgment of noninfringement.

This court agreed to rehear the appeal en banc and vacated the judgment of the panel. *Phillips v. AWH Corp.*, 376 F.3d 1382 (Fed. Cir. 2004). We now affirm the portion of the district court's judgment addressed to the trade secret misappropriation claims. However, we reverse the portion of the court's judgment addressed to the issue of infringement.

I

Claim 1 of the '798 patent is representative of the asserted claims with respect to the use of the term "baffles." It recites:

> Building modules adapted to fit together for construction of fire, sound and impact resistant security barriers and rooms for use in securing records and persons, comprising in combination, an outer shell . . . , sealant means . . . and further means disposed inside the shell for increasing its load bearing capacity comprising internal steel baffles extending inwardly from the steel shell walls.

As a preliminary matter, we agree with the panel that the term "baffles" is not means-plus-function language that invokes 35 U.S.C. § 112, paragraph 6. To be sure, the claim refers to "means disposed inside the shell for increasing its load bearing capacity," a formulation that would ordinarily be regarded as invoking the means-plus-function claim format. However, the claim specifically identifies "internal steel baffles" as structure that performs the recited function of increasing the shell's load-bearing capacity. In contrast to the "load bearing means" limitation, the reference to "baffles" does not use the word "means," and we have held that the absence of that term creates a rebuttable presumption that section 112, paragraph 6, does not apply. *See Personalized Media Communications, LLC v. Int'l Trade Comm'n*, 161 F.3d 696, 703-04 (Fed. Cir. 1998).

Means-plus-function claiming applies only to purely functional limitations that do not provide the structure that performs the recited function. *See Watts v. XL Sys., Inc.*, 232 F.3d 877, 880-81 (Fed. Cir. 2000). While the baffles in the '798 patent are clearly intended to perform

several functions, the term "baffles" is nonetheless structural; it is not a purely functional placeholder in which structure is filled in by the specification. *See TurboCare Div. of Demag Delaval Turbomachinery Corp. v. Gen. Elec. Co.*, 264 F.3d 1111, 1121 (Fed. Cir. 2001) (reasoning that nothing in the specification or prosecution history suggests that the patentee used the term "compressed spring" to denote any structure that is capable of performing the specified function); *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996) (construing the term "detent mechanism" to refer to particular structure, even though the term has functional connotations). The claims and the specification unmistakably establish that the "steel baffles" refer to particular physical apparatus. The claim characterizes the baffles as "extending inwardly" from the steel shell walls, which plainly implies that the baffles are structures. The specification likewise makes clear that the term "steel baffles" refers to particular internal wall structures and is not simply a general description of any structure that will perform a particular function. *See, e.g.*, '798 patent, col. 4, ll. 25-26 ("the load bearing baffles 16 are optionally used with longer panels"); *id.*, col. 4, ll. 49-50 (opposing panels are "compressed between the flange 35 and the baffle 26"). Because the term "baffles" is not subject to section 112, paragraph 6, we agree with the panel that the district court erred by limiting the term to corresponding structures disclosed in the specification and their equivalents. Accordingly, we must determine the correct construction of the structural term "baffles," as used in the '798 patent.

II

The first paragraph of section 112 of the Patent Act, 35 U.S.C. § 112, states that the specification

> shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains . . . to make and use the same. . . .

The second paragraph of section 112 provides that the specification

> shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Those two paragraphs of section 112 frame the issue of claim interpretation for us. The second paragraph requires us to look to the language of the claims to determine what "the applicant regards as his invention." On the other hand, the first paragraph requires that the specification describe the invention set forth in the claims. The principal question that this case presents to us is the extent to which we should resort to and rely on a patent's specification in seeking to ascertain the proper scope of its claims.

This is hardly a new question. The role of the specification in claim construction has been an issue in patent law decisions in this country for nearly two centuries. We addressed the relationship between the specification and the claims at some length in our en banc opinion in *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979-81 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370, 1384

(1996). We again summarized the applicable principles in *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576 (Fed. Cir. 1996), and more recently in *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111 (Fed. Cir. 2004). What we said in those cases bears restating, for the basic principles of claim construction outlined there are still applicable, and we reaffirm them today. We have also previously considered the use of dictionaries in claim construction. What we have said in that regard requires clarification.

A

It is a "bedrock principle" of patent law that "the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Innova*, 381 F.3d at 1115; *see also Vitronics*, 90 F.3d at 1582 ("we look to the words of the claims themselves . . . to define the scope of the patented invention"); *Markman*, 52 F.3d at 980 ("The written description part of the specification itself does not delimit the right to exclude. That is the function and purpose of claims."). That principle has been recognized since at least 1836, when Congress first required that the specification include a portion in which the inventor "shall particularly specify and point out the part, improvement, or combination, which he claims as his own invention or discovery." Act of July 4, 1836, ch. 357, § 6, 5 Stat. 117, 119. In the following years, the Supreme Court made clear that the claims are "of primary importance, in the effort to ascertain precisely what it is that is patented." *Merrill v. Yeomans*, 94 U.S. 568, 570 (1876). Because the patentee is required to "define precisely what his invention is," the Court explained, it is "unjust to the public, as well as an evasion of the law, to construe it in a manner different

from the plain import of its terms." *White v. Dunbar*, 119 U.S. 47, 52 (1886); *see also Cont'l Paper Bag Co. v. E. Paper Bag Co.*, 210 U.S. 405, 419 (1908) ("the claims measure the invention"); *McCarty v. Lehigh Valley R.R. Co.*, 160 U.S. 110, 116 (1895) ("if we once begin to include elements not mentioned in the claim, in order to limit such claim . . . , we should never know where to stop"); *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 339 (1961) ("the claims made in the patent are the sole measure of the grant").

We have frequently stated that the words of a claim "are generally given their ordinary and customary meaning." *Vitronics*, 90 F.3d at 1582; *see also Toro Co. v. White Consol. Indus., Inc.*, 199 F.3d 1295, 1299 (Fed. Cir. 1999); *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1249 (Fed. Cir. 1998). We have made clear, moreover, that the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application. *See Innova*, 381 F.3d at 1116 ("A court construing a patent claim seeks to accord a claim the meaning it would have to a person of ordinary skill in the art at the time of the invention."); *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1358 (Fed. Cir. 2004) ("customary meaning" refers to the "customary meaning in [the] art field"); *Ferguson Beauregard/Logic Controls v. Mega Sys., LLC*, 350 F.3d 1327, 1338 (Fed. Cir. 2003) (claim terms "are examined through the viewing glass of a person skilled in the art"); *see also PC Connector Solutions LLC v. SmartDisk Corp.*, 406 F.3d 1359, 1363 (Fed. Cir. 2005) (meaning of claim "must be interpreted as of [the] effective

filing date" of the patent application); *Schering Corp. v. Amgen Inc.*, 222 F.3d 1347, 1353 (Fed. Cir. 2000) (same).

The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation. *See Innova*, 381 F.3d at 1116. That starting point is based on the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art. *See Verve, LLC v. Crane Cams, Inc.*, 311 F.3d 1116, 1119 (Fed. Cir. 2002) (patent documents are meant to be "a concise statement for persons in the field"); *In re Nelson*, 280 F.2d 172, 181 (CCPA 1960) ("The descriptions in patents are not addressed to the public generally, to lawyers or to judges, but, as section 112 says, to those skilled in the art to which the invention pertains or with which it is most nearly connected.").

Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification. This court explained that point well in *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477 (Fed. Cir. 1998):

> It is the person of ordinary skill in the field of the invention through whose eyes the claims are construed. Such person is deemed to read the words used in the patent documents with an understanding of their meaning in the field, and to have knowledge of any special meaning and usage in the field. The inventor's words that are used to describe the invention – the inventor's

> lexicography – must be understood and interpreted by the court as they would be understood and interpreted by a person in that field of technology. Thus the court starts the decisionmaking process by reviewing the same resources as would that person, viz., the patent specification and the prosecution history.

See also Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1319 (Fed. Cir. 2005) ("We cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history."); *V-Formation, Inc. v. Benetton Group SpA*, 401 F.3d 1307, 1310 (Fed. Cir. 2005) (intrinsic record "usually provides the technological and temporal context to enable the court to ascertain the meaning of the claim to one of ordinary skill in the art at the time of the invention"); *Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc.*, 375 F.3d 1341, 1351 (Fed. Cir. 2004) (proper definition is the "definition that one of ordinary skill in the art could ascertain from the intrinsic evidence in the record").

B

In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words. *See Brown v. 3M*, 265 F.3d 1349, 1352 (Fed Cir. 2001) (holding that the claims did "not require elaborate interpretation"). In such circumstances, general purpose dictionaries may be helpful. In many cases that give rise to

litigation, however, determining the ordinary and customary meaning of the claim requires examination of terms that have a particular meaning in a field of art. Because the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to "those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean." *Innova*, 381 F.3d at 1116. Those sources include "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *Id.*; *see also Gemstar-TV Guide Int'l, Inc. v. Int'l Trade Comm'n*, 383 F.3d 1352, 1364 (Fed. Cir. 2004); *Vitronics*, 90 F.3d at 1582-83; *Markman*, 52 F.3d at 979-80.

1

Quite apart from the written description and the prosecution history, the claims themselves provide substantial guidance as to the meaning of particular claim terms. *See Vitronics*, 90 F.3d at 1582; *see also ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) ("the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms").

To begin with, the context in which a term is used in the asserted claim can be highly instructive. To take a simple example, the claim in this case refers to "steel baffles," which strongly implies that the term "baffles" does not inherently mean objects made of steel. This

court's cases provide numerous similar examples in which the use of a term within the claim provides a firm basis for construing the term. *See, e.g.*, *Mars, Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1374 (Fed. Cir. 2004) (claim term "ingredients" construed in light of the use of the term "mixture" in the same claim phrase); *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1356 (Fed. Cir. 1999) (claim term "discharge rate" construed in light of the use of the same term in another limitation of the same claim).

Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term. *Vitronics*, 90 F.3d at 1582. Because claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims. *See Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001); *CVI/Beta Ventures, Inc. v. Tura LP*, 112 F.3d 1146, 1159 (Fed. Cir. 1997). Differences among claims can also be a useful guide in understanding the meaning of particular claim terms. *See Laitram Corp. v. Rexnord, Inc.*, 939 F.2d 1533, 1538 (Fed. Cir. 1991). For example, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 910 (Fed. Cir. 2004).

2

The claims, of course, do not stand alone. Rather, they are part of "a fully integrated written instrument," *Markman*, 52 F.3d at 978, consisting principally of a specification that concludes with the claims. For that reason,

claims "must be read in view of the specification, of which they are a part." *Id.* at 979. As we stated in *Vitronics*, the specification "is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." 90 F.3d at 1582.

This court and its predecessors have long emphasized the importance of the specification in claim construction. In *Autogiro Co. of America v. United States*, 384 F.2d 391, 397-98 (Ct. Cl. 1967), the Court of Claims characterized the specification as "a concordance for the claims," based on the statutory requirement that the specification "describe the manner and process of making and using" the patented invention. The Court of Customs and Patent Appeals made a similar point. *See In re Fout*, 675 F.2d 297, 300 (CCPA 1982) ("Claims must always be read in light of the specification. Here, the specification makes plain what the appellants did and did not invent. . . . ").

Shortly after the creation of this court, Judge Rich wrote that "[t]he descriptive part of the specification aids in ascertaining the scope and meaning of the claims inasmuch as the words of the claims must be based on the description. The specification is, thus, the primary basis for construing the claims." *Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985). On numerous occasions since then, we have reaffirmed that point, stating that "[t]he best source for understanding a technical term is the specification from which it arose, informed, as needed, by the prosecution history." *Multiform Dessicants*, 133 F.3d at 1478; *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1360 (Fed. Cir. 2004) ("In most cases, the best source for discerning the

proper context of claim terms is the patent specification wherein the patent applicant describes the invention."); *see also, e.g., Kinik Co. v. Int'l Trade Comm'n*, 362 F.3d 1359, 1365 (Fed. Cir. 2004) ("The words of patent claims have the meaning and scope with which they are used in the specification and the prosecution history."); *Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1315 (Fed. Cir. 2003) ("[T]he best indicator of claim meaning is its usage in context as understood by one of skill in the art at the time of invention.").

That principle has a long pedigree in Supreme Court decisions as well. *See Hogg v. Emerson*, 47 U.S. (6 How.) 437, 482 (1848) (the specification is a "component part of the patent" and "is as much to be considered with the [letters patent] in construing them, as any paper referred to in a deed or other contract"); *Bates v. Coe*, 98 U.S. 31, 38 (1878) ("in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims"); *White v. Dunbar*, 119 U.S. 47, 51 (1886) (specification is appropriately resorted to "for the purpose of better understanding the meaning of the claim"); *Schriber-Schroth Co. v. Cleveland Trust Co.*, 311 U.S. 211, 217 (1940) ("The claims of a patent are always to be read or interpreted in light of its specifications."); *United States v. Adams*, 383 U.S. 39, 49 (1966) ("[I]t is fundamental that claims are to be construed in the light of the specifications and both are to be read with a view to ascertaining the invention.").

The importance of the specification in claim construction derives from its statutory role. The close kinship between the written description and the claims is enforced

by the statutory requirement that the specification describe the claimed invention in "full, clear, concise, and exact terms." 35 U.S.C. § 112, para. 1; *see Netword, LLC v. Centraal Corp.*, 242 F.3d 1347, 1352 (Fed. Cir. 2001) ("The claims are directed to the invention that is described in the specification; they do not have meaning removed from the context from which they arose."); *see also Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 389 (1996) ("[A claim] term can be defined only in a way that comports with the instrument as a whole."). In light of the statutory directive that the inventor provide a "full" and "exact" description of the claimed invention, the specification necessarily informs the proper construction of the claims. *See Merck & Co. v. Teva Pharms. USA, Inc.*, 347 F.3d 1367, 1371 (Fed. Cir. 2003) ("A fundamental rule of claim construction is that terms in a patent document are construed with the meaning with which they are presented in the patent document. Thus claims must be construed so as to be consistent with the specification, of which they are a part.") (citations omitted). In *Renishaw*, this court summarized that point succinctly:

> Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

158 F.3d at 1250 (citations omitted).

Consistent with that general principle, our cases recognize that the specification may reveal a special definition given to a claim term by the patentee that

differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs. *See CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002). In other cases, the specification may reveal an intentional disclaimer, or disavowal, of claim scope by the inventor. In that instance as well, the inventor has dictated the correct claim scope, and the inventor's intention, as expressed in the specification, is regarded as dispositive. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343-44 (Fed. Cir. 2001).

The pertinence of the specification to claim construction is reinforced by the manner in which a patent is issued. The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Indeed, the rules of the PTO require that application claims must "conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." 37 C.F.R. § 1.75(d)(1). It is therefore entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of the claims.

In addition to consulting the specification, we have held that a court "should also consider the patent's prosecution history, if it is in evidence." *Markman*, 52 F.3d at 980; *see also Graham v. John Deere Co.*, 383 U.S. 1, 33 (1966) ("[A]n invention is construed not only in the light of the claims, but also with reference to the file wrapper or prosecution history in the Patent Office."). The prosecution history, which we have designated as part of the "intrinsic evidence," consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent. *Autogiro*, 384 F.2d at 399. Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent. *See Lemelson v. Gen. Mills, Inc.*, 968 F.2d 1202, 1206 (Fed. Cir. 1992). Furthermore, like the specification, the prosecution history was created by the patentee in attempting to explain and obtain the patent. Yet because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes. *See Inverness Med. Switz. GmbH v. Warner Lambert Co.*, 309 F.3d 1373, 1380-82 (Fed. Cir. 2002) (the ambiguity of the prosecution history made it less relevant to claim construction); *Athletic Alternatives, Inc. v. Prince Mfg., Inc.*, 73 F.3d 1573, 1580 (Fed. Cir. 1996) (the ambiguity of the prosecution history made it "unhelpful as an interpretive resource" for claim construction). Nonetheless, the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would

otherwise be. *Vitronics*, 90 F.3d at 1582-83; *see also Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005) ("The purpose of consulting the prosecution history in construing a claim is to 'exclude any interpretation that was disclaimed during prosecution.'"), quoting *ZMI Corp. v. Cardiac Resuscitator Corp.*, 844 F.2d 1576, 1580 (Fed. Cir. 1988); *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995).

C

Although we have emphasized the importance of intrinsic evidence in claim construction, we have also authorized district courts to rely on extrinsic evidence, which "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Markman*, 52 F.3d at 980, citing *Seymour v. Osborne*, 78 U.S. (11 Wall.) 516, 546 (1870); *see also Vitronics*, 90 F.3d at 1583. However, while extrinsic evidence "can shed useful light on the relevant art," we have explained that it is "less significant than the intrinsic record in determining 'the legally operative meaning of claim language.'" *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004), quoting *Vanderlande Indus. Nederland BV v. Int'l Trade Comm'n*, 366 F.3d 1311, 1318 (Fed. Cir. 2004); *see also Astrazeneca AB v. Mutual Pharm. Co.*, 384 F.3d 1333, 1337 (Fed. Cir. 2004).

Within the class of extrinsic evidence, the court has observed that dictionaries and treatises can be useful in claim construction. *See Renishaw*, 158 F.3d at 1250; *Rexnord*, 274 F.3d at 1344. We have especially noted the help that technical dictionaries may provide to a court "to

better understand the underlying technology" and the way in which one of skill in the art might use the claim terms. *Vitronics*, 90 F.3d at 1584 n.6. Because dictionaries, and especially technical dictionaries, endeavor to collect the accepted meanings of terms used in various fields of science and technology, those resources have been properly recognized as among the many tools that can assist the court in determining the meaning of particular terminology to those of skill in the art of the invention. *See Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). Such evidence, we have held, may be considered if the court deems it helpful in determining "the true meaning of language used in the patent claims." *Markman*, 52 F.3d at 980.

We have also held that extrinsic evidence in the form of expert testimony can be useful to a court for a variety of purposes, such as to provide background on the technology at issue, to explain how an invention works, to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308-09 (Fed. Cir. 1999); *Key Pharms. v. Hercon Labs. Corp.*, 161 F.3d 709, 716 (Fed. Cir. 1998). However, conclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court. Similarly, a court should discount any expert testimony "that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent." *Key Pharms.*, 161 F.3d at 716.

We have viewed extrinsic evidence in general as less reliable than the patent and its prosecution history in determining how to read claim terms, for several reasons. First, extrinsic evidence by definition is not part of the patent and does not have the specification's virtue of being created at the time of patent prosecution for the purpose of explaining the patent's scope and meaning. Second, while claims are construed as they would be understood by a hypothetical person of skill in the art, extrinsic publications may not be written by or for skilled artisans and therefore may not reflect the understanding of a skilled artisan in the field of the patent. Third, extrinsic evidence consisting of expert reports and testimony is generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence. The effect of that bias can be exacerbated if the expert is not one of skill in the relevant art or if the expert's opinion is offered in a form that is not subject to cross-examination. *See Senmed, Inc. v. Richard-Allan Med. Indus., Inc.*, 888 F.2d 815, 819 n.8 (Fed. Cir. 1989). Fourth, there is a virtually unbounded universe of potential extrinsic evidence of some marginal relevance that could be brought to bear on any claim construction question. In the course of litigation, each party will naturally choose the pieces of extrinsic evidence most favorable to its cause, leaving the court with the considerable task of filtering the useful extrinsic evidence from the fluff. *See Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 595, [125 L. Ed. 2d 469, 113 S. Ct. 2786 (1993)] ("Expert evidence can be both powerful and quite misleading because of the difficulty in evaluating it."). Finally, undue reliance on extrinsic evidence poses the risk that it will be used to change the meaning of claims in derogation of the "indisputable public records consisting of the claims,

the specification and the prosecution history," thereby undermining the public notice function of patents. *Southwall Techs.*, 54 F.3d at 1578.

In sum, extrinsic evidence may be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence. Nonetheless, because extrinsic evidence can help educate the court regarding the field of the invention and can help the court determine what a person of ordinary skill in the art would understand claim terms to mean, it is permissible for the district court in its sound discretion to admit and use such evidence. In exercising that discretion, and in weighing all the evidence bearing on claim construction, the court should keep in mind the flaws inherent in each type of evidence and assess that evidence accordingly.

III

Although the principles outlined above have been articulated on numerous occasions, some of this court's cases have suggested a somewhat different approach to claim construction, in which the court has given greater emphasis to dictionary definitions of claim terms and has assigned a less prominent role to the specification and the prosecution history. The leading case in this line is *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002).

A

In *Texas Digital*, the court noted that "dictionaries, encyclopedias and treatises are particularly useful resources to assist the court in determining the ordinary and

customary meanings of claim terms." 308 F.3d at 1202. Those texts, the court explained, are "objective resources that serve as reliable sources of information on the established meanings that would have been attributed to the terms of the claims by those of skill in the art," and they "deserve no less fealty in the context of claim construction" than in any other area of law. *Id.* at 1203. The court added that because words often have multiple dictionary meanings, the intrinsic record must be consulted to determine which of the different possible dictionary meanings is most consistent with the use of the term in question by the inventor. If more than one dictionary definition is consistent with the use of the words in the intrinsic record, the court stated, "the claim terms may be construed to encompass all such consistent meanings." *Id.*

The *Texas Digital* court further explained that the patent's specification and prosecution history must be consulted to determine if the patentee has used "the words [of the claim] in a manner clearly inconsistent with the ordinary meaning reflected, for example, in a dictionary definition." 308 F.3d at 1204. The court identified two circumstances in which such an inconsistency may be found. First, the court stated, "the presumption in favor of a dictionary definition will be overcome where the patentee, acting as his or her own lexicographer, has clearly set forth an explicit definition of the term different from its ordinary meaning." *Id.* Second, "the presumption also will be rebutted if the inventor has disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." *Id.*

The *Texas Digital* court explained that it advanced the methodology set forth in that opinion in an effort to

combat what this court has termed "one of the cardinal sins of patent law – reading a limitation from the written description into the claims," *SciMed Life Sys.*, 242 F.3d at 1340. The court concluded that it is improper to consult "the written description and prosecution history as a threshold step in the claim construction process, before any effort is made to discern the ordinary and customary meanings attributed to the words themselves." *Texas Digital*, 308 F.3d at 1204. To do so, the court reasoned, "invites a violation of our precedent counseling against importing limitations into the claims." *Id.* Summarizing its analysis, the *Texas Digital* court stated:

> By examining relevant dictionaries, encyclopedias, and treatises to ascertain possible meanings that would have been attributed to the words of the claims by those skilled in the art, and by further utilizing the intrinsic record to select from those possible meanings the one or ones most consistent with the use of the words by the inventor, the full breadth of the limitations intended by the inventor will be more accurately determined and the improper importation of unintended limitations from the written description into the claims will be more easily avoided.

Id. at 1205.

B

Although the concern expressed by the court in *Texas Digital* was valid, the methodology it adopted placed too much reliance on extrinsic sources such as dictionaries, treatises, and encyclopedias and too little on intrinsic sources, in particular the specification and prosecution history. While the court noted that the specification must be consulted in every case, it suggested a methodology for

claim interpretation in which the specification should be consulted only after a determination is made, whether based on a dictionary, treatise, or other source, as to the ordinary meaning or meanings of the claim term in dispute. Even then, recourse to the specification is limited to determining whether the specification excludes one of the meanings derived from the dictionary, whether the presumption in favor of the dictionary definition of the claim term has been overcome by "an explicit definition of the term different from its ordinary meaning," or whether the invent or "has disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." 308 F.3d at 1204. In effect, the *Texas Digital* approach limits the role of the specification in claim construction to serving as a check on the dictionary meaning of a claim term if the specification requires the court to conclude that fewer than all the dictionary definitions apply, or if the specification contains a sufficiently specific alternative definition or disavowal. *See, e.g.*, *Texas Digital*, 308 F.3d at 1202 ("unless compelled otherwise, a court will give a claim term the full range of its ordinary meaning"); *Nystrom v. TREX Co.*, 374 F.3d 1105, 1111-13 (Fed. Cir. 2004) (ascertaining the "full range" of the ordinary meaning of the term "board" through a collection of dictionary definitions, and stating that those candidate definitions should be removed from consideration only if they were "disclaimed" in the written description or prosecution history); *Inverness Med. Switz.*, 309 F.3d at 1379 (claim should be construed to encompass multiple dictionary meanings unless "the specification or prosecution history clearly demonstrates that only one of the multiple meanings was intended"). That approach, in our

view; improperly restricts the role of the specification in claim construction.

Assigning such a limited role to the specification, and in particular requiring that any definition of claim language in the specification be express, is inconsistent with our rulings that the specification is "the single best guide to the meaning of a disputed term," and that the specification "acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication." *Vitronics*, 90 F.3d at 1582; *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1300 (Fed. Cir. 2004) ("Even when guidance is not provided in explicit definitional format, the specification may define claim terms by implication such that the meaning may be found in or ascertained by a reading of the patent documents.") (citations omitted); *Novartis Pharms. Corp. v. Abbott Labs.*, 375 F.3d 1328, 1334-35 (Fed. Cir. 2004) (same); *Bell Atl. Network Servs., Inc. v. Covad Communications Group, Inc.*, 262 F.3d 1258, 1268 (Fed. Cir. 2001) ("[A] claim term may be clearly redefined without an explicit statement of redefinition.").

The main problem with elevating the dictionary to such prominence is that it focuses the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent. Properly viewed, the "ordinary meaning" of a claim term is its meaning to the ordinary artisan after reading the entire patent. Yet heavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract, out of its particular context, which is the specification. The patent system is based on the proposition that claims cover only the invented subject matter. As

the Supreme Court has stated, "it seems to us that nothing can be more just and fair, both to the patentee and the public, than that the former should understand, and correctly describe, just what he has invented, and for what he claims a patent." *Merrill v. Yeomans*, 94 U.S. at 573-74. The use of a dictionary definition can conflict with that directive because the patent applicant did not create the dictionary to describe the invention. Thus, there may be a disconnect between the patentee's responsibility to describe and claim his invention, and the dictionary editors' objective of aggregating all possible definitions for particular words.

Although the *Texas Digital* line of cases permit the dictionary definition to be narrowed in some circumstances even when there is not an explicit disclaimer or redefinition in the specification, too often that line of cases has been improperly relied upon to condone the adoption of a dictionary definition entirely divorced from the context of the written description. The problem is that if the district court starts with the broad dictionary definition in every case and fails to fully appreciate how the specification implicitly limits that definition, the error will systematically cause the construction of the claim to be unduly expansive. The risk of systematic overbreadth is greatly reduced if the court instead focuses at the outset on how the patentee used the claim term in the claims, specification, and prosecution history, rather than starting with a broad definition and whittling it down.

Dictionaries, by their nature, provide an expansive array of definitions. General dictionaries, in particular, strive to collect all uses of particular words, from the common to the obscure. By design, general dictionaries collect the definitions of a term as used not only in a

particular art field, but in many different settings. In such circumstances, it is inevitable that the multiple dictionary definitions for a term will extend beyond the "construction of the patent [that] is confirmed by the avowed understanding of the patentee, expressed by him, or on his behalf, when his application for the original patent was pending." *Goodyear Dental Vulcanite Co. v. Davis,* 102 U.S. 222, 227 (1880). Thus, the use of the dictionary may extend patent protection beyond what should properly be afforded by the inventor's patent. *See Smith v. Snow,* 294 U.S. 1, 14 (1935) ("if the claim were fairly susceptible of two constructions, that should be adopted which will secure to the patentee *his actual invention*") (emphasis added). For that reason, we have stated that "a general-usage dictionary cannot overcome art-specific evidence of the meaning" of a claim term. *Vanderlande Indus. Nederland,* 366 F.3d at 1321; *see also Renishaw,* 158 F.3d at 1250, *quoting Liebscher v. Boothroyd,* 258 F.2d 948, 951 (CCPA 1958) ("Indiscriminate reliance on definitions found in dictionaries can often produce absurd results. . . . One need not arbitrarily pick and choose from the various accepted definitions of a word to decide which meaning was intended as the word is used in a given claim. The subject matter, the context, etc., will more often than not lead to the correct conclusion.").

Even technical dictionaries or treatises, under certain circumstances, may suffer from some of these deficiencies. There is no guarantee that a term is used in the same way in a treatise as it would be by the patentee. In fact, discrepancies between the patent and treatises are apt to be common because the patent by its nature describes something novel. *See Autogiro,* 384 F.2d at 397 ("Often the invention is novel and words do not exist to describe it.

The dictionary does not always keep abreast of the inventor. It cannot.").

Moreover, different dictionaries may contain somewhat different sets of definitions for the same words. A claim should not rise or fall based upon the preferences of a particular dictionary editor, or the court's independent decision, uninformed by the specification, to rely on one dictionary rather than another. Finally, the authors of dictionaries or treatises may simplify ideas to communicate them most effectively to the public and may thus choose a meaning that is not pertinent to the understanding of particular claim language. *See generally* Ellen P. Aprill, *The Law of the Word: Dictionary Shopping in the Supreme Court*, 30 Ariz. St. L.J. 275, 293-314 (1998). The resulting definitions therefore do not necessarily reflect the inventor's goal of distinctly setting forth his invention as a person of ordinary skill in that particular art would understand it.

As we have noted above, however, we do not intend to preclude the appropriate use of dictionaries. Dictionaries or comparable sources are often useful to assist in understanding the commonly understood meaning of words and have been used both by our court and the Supreme Court in claim interpretation. *See Exhibit Supply Co. v. Ace Patents Corp.*, 315 U.S. 126, 134 (1942) (relying on dictionaries to construe the claim term "embedded"); *Weber Elec. Co. v. E.H. Freeman Elec. Co.*, 256 U.S. 668, 678 (1921) (approving circuit court's use of dictionary definitions to define claim terms); *Renishaw*, 158 F.3d at 1247-53 (approving the use of dictionaries with proper respect for the role of intrinsic evidence). A dictionary definition has the value of being an unbiased source "accessible to the public in advance of litigation." *Vitronics*, 90 F.3d at

1585. As we said in *Vitronics*, judges are free to consult dictionaries and technical treatises

> at any time in order to better understand the underlying technology and may also rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents.

Id. at 1584 n.6.

We also acknowledge that the purpose underlying the *Texas Digital* line of cases – to avoid the danger of reading limitations from the specification into the claim – is sound. Moreover, we recognize that the distinction between using the specification to interpret the meaning of a claim and importing limitations from the specification into the claim can be a difficult one to apply in practice. *See Comark Communications, Inc. v. Harris Corp.*, 156 F.3d 1182, 1186-87 (Fed. Cir. 1998) ("there is sometimes a fine line between reading a claim in light of the specification, and reading a limitation into the claim from the specification"). However, the line between construing terms and importing limitations can be discerned with reasonable certainty and predictability if the court's focus remains on understanding how a person of ordinary skill in the art would understand the claim terms. For instance, although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments. *See, e.g., Nazomi Communications, Inc. v. ARM Holdings, PLC*, 403 F.3d 1364, 1369 (Fed. Cir. 2005) (claims may embrace "different subject matter than is illustrated in the specific embodiments in the specification"); *Liebel-Flarsheim*, 358 F.3d at 906-08; *Teleflex*, 299 F.3d at 1327; *SRI Int'l v. Matsushita*

Elec. Corp. of Am., 775 F.2d 1107, 1121 (Fed. Cir. 1985). In particular, we have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment. *Gemstar-TV Guide*, 383 F.3d at 1366. That is not just because section 112 of the Patent Act requires that the claims themselves set forth the limits of the patent grant, but also because persons of ordinary skill in the art rarely would confine their definitions of terms to the exact representations depicted in the embodiments.

To avoid importing limitations from the specification into the claims, it is important to keep in mind that the purposes of the specification are to teach and enable those of skill in the art to make and use the invention and to provide a best mode for doing so. *See Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1533 (Fed. Cir. 1987). One of the best ways to teach a person of ordinary skill in the art how to make and use the invention is to provide an example of how to practice the invention in a particular case. Much of the time, upon reading the specification in that context, it will become clear whether the patentee is setting out specific examples of the invention to accomplish those goals, or whether the patentee instead intends for the claims and the embodiments in the specification to be strictly coextensive. *See SciMed Life Sys.*, 242 F.3d at 1341. The manner in which the patentee uses a term within the specification and claims usually will make the distinction apparent. *See Snow v. Lake Shore & M.S. Ry. Co.*, 121 U.S. 617, 630 (1887) (it was clear from the specification that there was "nothing in the context to indicate that the patentee contemplated any alternative" embodiment to the one presented).

In the end, there will still remain some cases in which it will be hard to determine whether a person of skill in the art would understand the embodiments to define the outer limits of the claim term or merely to be exemplary in nature. While that task may present difficulties in some cases, we nonetheless believe that attempting to resolve that problem in the context of the particular patent is likely to capture the scope of the actual invention more accurately than either strictly limiting the scope of the claims to the embodiments disclosed in the specification or divorcing the claim language from the specification.

In *Vitronics*, this court grappled with the same problem and set forth guidelines for reaching the correct claim construction and not imposing improper limitations on claims. 90 F.3d at 1582. The underlying goal of our decision in *Vitronics* was to increase the likelihood that a court will comprehend how a person of ordinary skill in the art would understand the claim terms. *See id.* at 1584. In that process, we recognized that there is no magic formula or catechism for conducting claim construction. Nor is the court barred from considering any particular sources or required to analyze sources in any specific sequence, as long as those sources are not used to contradict claim meaning that is unambiguous in light of the intrinsic evidence. *See id.* at 1583-84; *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1367 (Fed. Cir. 2003). For example, a judge who encounters a claim term while reading a patent might consult a general purpose or specialized dictionary to begin to understand the meaning of the term, before reviewing the remainder of the patent to determine how the patentee has used the term. The sequence of steps used by the judge in consulting various sources is not important; what matters is for the court to attach the

appropriate weight to be assigned to those sources in light of the statutes and policies that inform patent law. *Vitronics*, 90 F.3d at 1582. In *Vitronics*, we did not attempt to provide a rigid algorithm for claim construction, but simply attempted to explain why, in general, certain types of evidence are more valuable than others. Today, we adhere to that approach and reaffirm the approach to claim construction outlined in that case, in *Markman*, and in *Innova*. We now turn to the application of those principles to the case at bar.

IV

A

The critical language of claim 1 of the '798 patent – "further means disposed inside the shell for increasing its load bearing capacity comprising internal steel baffles extending inwardly from the steel shell walls" – imposes three clear requirements with respect to the baffles. First, the baffles must be made of steel. Second, they must be part of the load-bearing means for the wall section. Third, they must be pointed inward from the walls. Both parties, stipulating to a dictionary definition, also conceded that the term "baffles" refers to objects that check, impede, or obstruct the flow of something. The intrinsic evidence confirms that a person of skill in the art would understand that the term "baffles," as used in the '798 patent, would have that generic meaning.

The other claims of the '798 patent specify particular functions to be served by the baffles. For example, dependent claim 2 states that the baffles may be "oriented with the panel sections disposed at angles for deflecting projectiles such as bullets able to penetrate the steel plates." The

inclusion of such a specific limitation on the term "baffles" in claim 2 makes it likely that the patentee did not contemplate that the term "baffles" already contained that limitation. *See Dow Chem. Co. v. United States*, 226 F.3d 1334, 1341-42 (Fed. Cir. 2000) (concluding that an independent claim should be given broader scope than a dependent claim to avoid rendering the dependent claim redundant). Independent claim 17 further supports that proposition. It states that baffles are placed "projecting inwardly from the outer shell at angles tending to deflect projectiles that penetrate the outer shell." That limitation would be unnecessary if persons of skill in the art understood that the baffles inherently served such a function. *See TurboCare*, 264 F.3d at 1123 (claim terms should not be read to contain a limitation "where another claim restricts the invention in exactly the [same] manner"). Dependent claim 6 provides an additional requirement for the baffles, stating that "the internal baffles of both outer panel sections overlap and interlock at angles providing deflector panels extending from one end of the module to the other." If the baffles recited in claim 1 were inherently placed at specific angles, or interlocked to form an intermediate barrier, claim 6 would be redundant.

The specification further supports the conclusion that persons of ordinary skill in the art would understand the baffles recited in the '798 patent to be load-bearing objects that serve to check, impede, or obstruct flow. At several points, the specification discusses positioning the baffles so as to deflect projectiles. *See* '798 patent, col. 2, ll. 13-15; *id.*, col. 5, ll. 17-19. The patent states that one advantage of the invention over the prior art is that "there have not been effective ways of dealing with these powerful impact weapons with inexpensive housing." *Id.*, col. 3, ll. 28-30. While that statement makes clear the invention envisions baffles that serve that function, it does not imply that in order to qualify as baffles within the meaning of the

claims, the internal support structures must serve the projectile-deflecting function in all the embodiments of all the claims. The specification must teach and enable all the claims, and the section of the written description discussing the use of baffles to deflect projectiles serves that purpose for claims 2, 6, 17, and 23, which specifically claim baffles that deflect projectiles. *See In re Wright*, 999 F.2d 1557, 1561 (Fed. Cir. 1993).

The specification discusses several other purposes served by the baffles. For example, the baffles are described as providing structural support. The patent states that one way to increase load-bearing capacity is to use "at least in part inwardly directed steel baffles 15, 16." '798 patent, col. 4, ll. 14-15. The baffle 16 is described as a "strengthening triangular baffle." *Id.*, col. 4, line 37. Importantly, Figures 4 and 6 do not show the baffles as part of an "intermediate interlocking, but not solid, internal barrier." In those figures, the baffle 16 simply provides structural support for one of the walls, as depicted below:

FIG. 1.

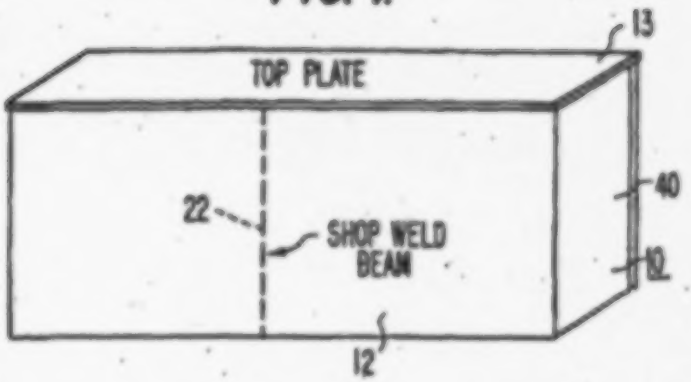

FIG. 3.

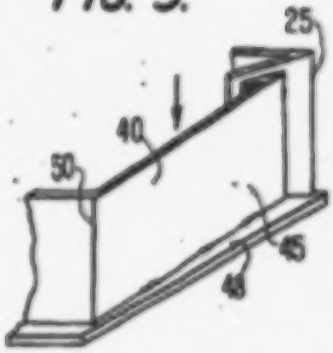

FIG. 2.

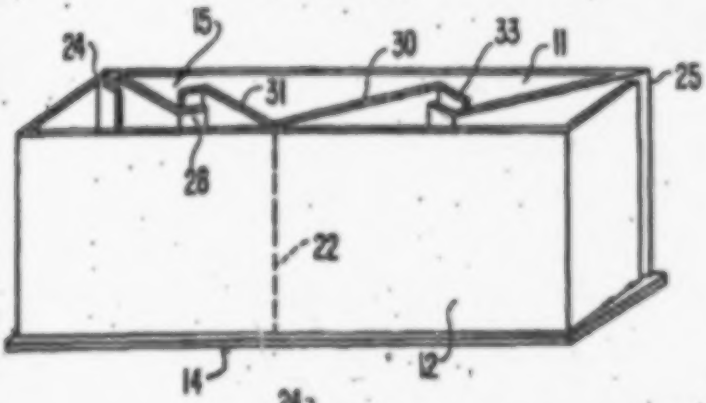

FIG. 4.

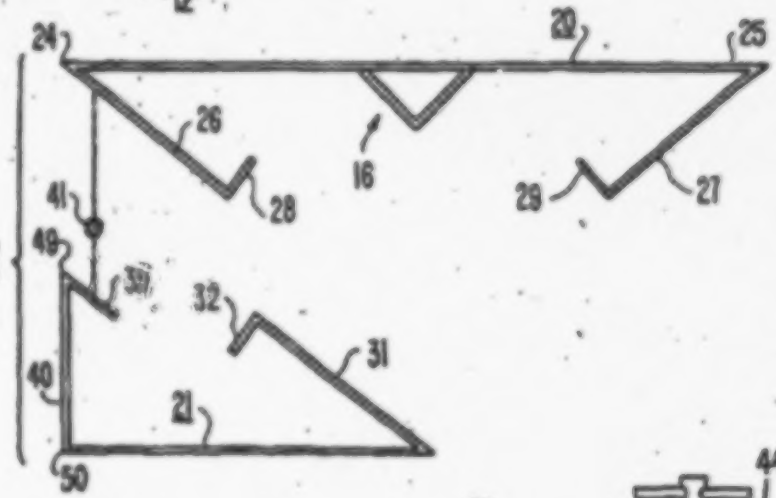

FIG. 5.

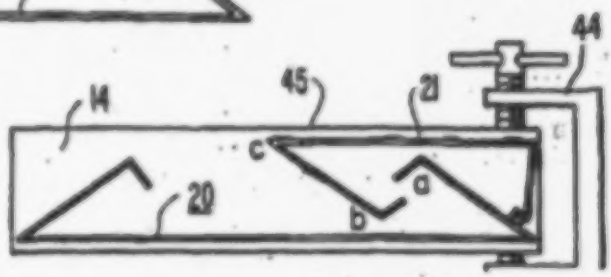

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FIG. 6.

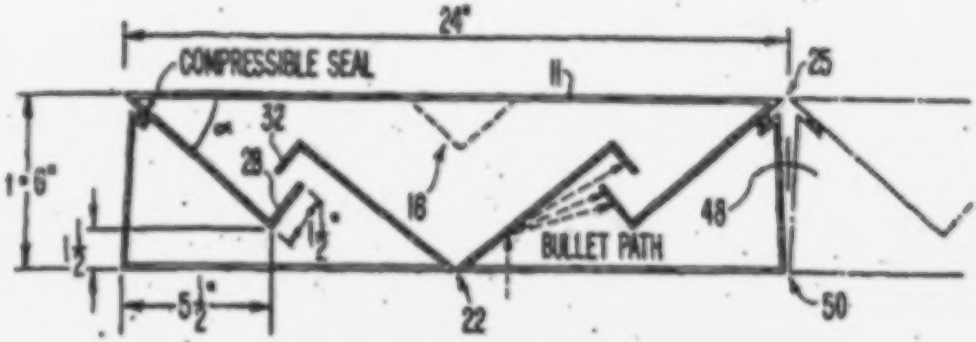


FIG. 7.

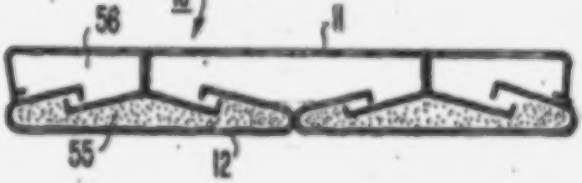


FIG. 8.

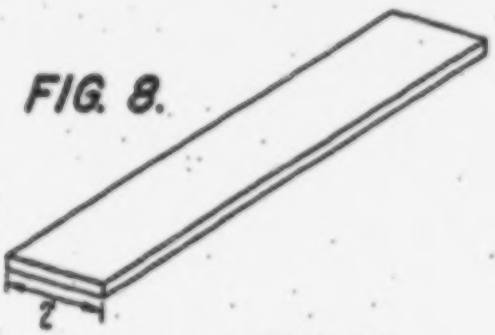
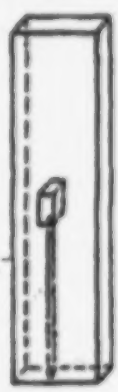


FIG. 10.

FIG. 9.

FIG. 11.



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Other uses for the baffles are listed in the specification as well. In Figure 7, the overlapping flanges "provide for overlapping and interlocking the baffles to produce substantially an intermediate barrier wall between the opposite [wall] faces":

FIG. 6.

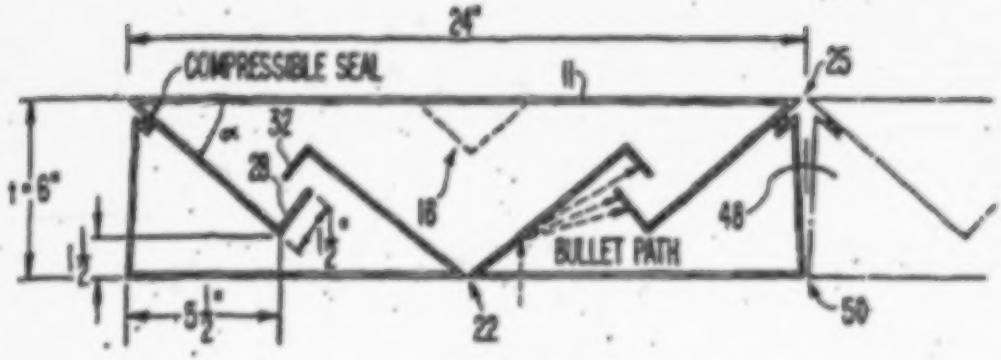

FIG. 7.

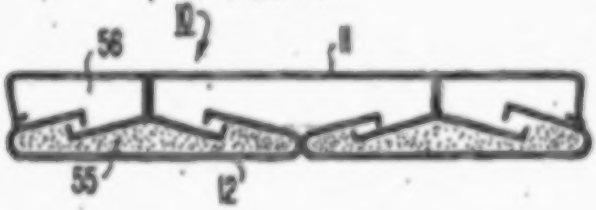

FIG. 8.

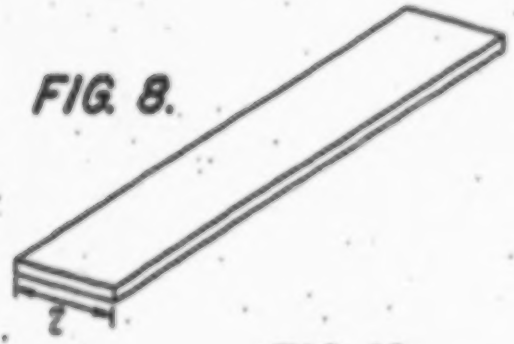

FIG. 10.

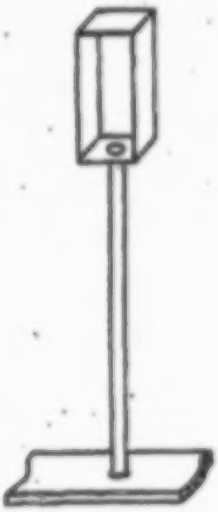

FIG. 9

FIG. 11.

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'798 patent, col. 5, ll. 26-29. Those baffles thus create small compartments that can be filled with either scund and thermal insulation or rock and gravel to stop projectiles. *Id.*, col. 5, ll. 29-34. By separating the interwall area in to [sic] compartments (*see, e.g.*, compartment 55 in Figure 7), the user of the modules can choose different types of material for each compartment, so that the module can be "easily custom tailored for the specific needs of each installation." *Id.*, col. 5, ll. 36-37. When material is placed into the wall during installation, the baffles obstruct the flow of material from one compartment to another so that this "custom tailoring" is possible.

The fact that the written description of the '798 patent sets forth multiple objectives to be served by the baffles recited in the claims confirms that the term "baffles" should not be read restrictively to require that the baffles in each case serve all of the recited functions. We have held that "the fact that a patent asserts that an invention achieves several objectives does not require that each of the claims be construed as limited to structures that are capable of achieving all of the objectives." *Liebel-Flarsheim*, 358 F.3d at 908; *see also Resonate Inc. v. Alteon Websystems, Inc.*, 338 F.3d 1360, 1367 (Fed. Cir. 2003). Although deflecting projectiles is one of the advantages of the baffles of the '798 patent, the patent does not require that the inward extending structures always be capable of performing that function. Accordingly, we conclude that a person of skill in the art would not interpret the disclosure and claims of the '798 patent to mean that a structure extending inward from one of the wall faces is a "baffle" if it is at an acute or obtuse angle, but is not a "baffle" if it is disposed at a right angle.

B

Invoking the principle that "claims should be so construed, if possible, as to sustain their validity," *Rhine v. Casio, Inc.*, 183 F.3d 1342, 1345 (Fed Cir. 1999), AWH argues that the term "baffles" should be given a restrictive meaning because if the term is not construed restrictively, the asserted claims would be invalid.

While we have acknowledged the maxim that claims should be construed to preserve their validity, we have not applied that principle broadly, and we have certainly not endorsed a regime in which validity analysis is a regular component of claim construction. *See Nazomi Communications*, 403 F.3d at 1368-69. Instead, we have limited the maxim to cases in which "the court concludes, after applying all the available tools of claim construction, that the claim is still ambiguous." *Liebel-Flarsheim*, 358 F.3d at 911; *see also Generation II Orthonics Inc. v. Med. Tech. Inc.*, 263 F.3d 1356, 1365 (Fed. Cir. 2001) ("[C]laims can only be construed to preserve their validity where the proposed claim construction is 'practicable,' is based on sound claim construction principles, and does not revise or ignore the explicit language of the claims."); *Elekta Instrument S.A. v. O.U.R. Scientific Int'l, Inc.*, 214 F.3d 1302, 1309 (Fed. Cir. 2000) ("having concluded that the amended claim is susceptible of only one reasonable construction, we cannot construe the claim differently from its plain meaning in order to preserve its validity"); *E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1434 (Fed. Cir. 1988) (rejecting argument that limitations should be added to claims to preserve the validity of the claims). In such cases, we have looked to whether it is reasonable to infer that the PTO would not have issued an invalid patent, and that the ambiguity in the claim

language should therefore be resolved in a manner that would preserve the patent's validity.

That is the rationale that gave rise to the maxim in the first place. In *Klein v. Russell,* 86 U.S. (19 Wall.) 433, 466 (1873), the owner of a reissued patent argued for a narrow construction of the patent, while the accused infringer argued for a broader construction. The Court noted that the law "required that the reissue should be for the same invention as the original patent." *Id.* Because the reissue, which was granted under the predecessor to 35 U.S.C. § 251, would have been improper under the broader construction, the Court "presumed the Commissioner did his duty" and did not issue an invalid patent. For that reason, among others, the Court construed the disputed claim language in a manner that "sustained the patent and the construction claimed by the patentee," since that "can be done consistently with the language which he has employed." *Id.* The applicability of the doctrine in a particular case therefore depends on the strength of the inference that the PTO would have recognized that one claim interpretation would render the claim invalid, and that the PTO would not have issued the patent assuming that to be the proper construction of the term.

In this case, unlike in *Klein* and other cases in which the doctrine of construing claims to preserve their validity has been invoked, the claim term at issue is not ambiguous. Thus, it can be construed without the need to consider whether one possible construction would render the claim invalid while the other would not. The doctrine of construing claims to preserve their validity, a doctrine of limited utility in any event, therefore has no applicability here.

In sum, we reject AWH's arguments in favor of a restrictive definition of the term "baffles." Because we disagree with the district court's claim construction, we reverse the summary judgment of noninfringement. In light of our decision on claim construction, it is necessary to remand the infringement claims to the district court for further proceedings.

V

With respect to Mr. Phillips's allegation of misappropriation of trade secrets, we agree with the panel's decision upholding the district court's ruling on that issue, in which the district court dismissed the trade secret claim on statute of limitations grounds. *See Phillips*, 363 F.3d at 1214-1216. Accordingly, based on the panel's disposition of that issue, we affirm the district court's dismissal of the trade secret claim. With respect to AWH's cross-appeal, we also agree with the panel's reasoning and its conclusion that the cross-appeal is improper. *See id.* at 1216. We therefore dismiss the cross-appeal.

VI

In our order granting rehearing en banc, we asked the parties to brief various questions, including the following: "Consistent with the Supreme Court's decision in *Markman v. Westview Instruments*, 517 U.S. 370 (1996), and our en banc decision in *Cybor Corp. v. FAS Technologies, Inc.*, 138 F.3d 1448 (Fed. Cir. 1998), is it appropriate for this court to accord any deference to any aspect of trial court claim construction rulings? If so, on what aspects, in what circumstances, and to what extent?" After consideration of the matter, we have decided not to address that issue at

this time. We therefore leave undisturbed our prior en banc decision in *Cybor*.

Each party shall bear its own costs for this appeal.

AFFIRMED IN PART, REVERSED IN PART, DISMISSED IN PART, and REMANDED.

CONCUR BY: LOURIE (In Part)

DISSENT BY: LOURIE (In Part); MAYER

DISSENT: LOURIE, Circuit Judge, concurring in part and dissenting in part, with whom NEWMAN, Circuit Judge, joins.

I fully join the portion of the court's opinion resolving the relative weights of specification and dictionaries in interpreting patent claims, in favor of the specification. I could elaborate more expansively on that topic, but Judge Bryson's opinion for the majority says it so well, there is little reason for me to repeat its truths. I also agree with the court that claims need not necessarily be limited to specific or preferred embodiments in the specification, although they are limited to what is contained in the overall disclosure of the specification.

However, I do dissent from the court's decision to reverse and remand the district court's decision. The original panel decision of this court, which implicitly decided the case based on the priorities that the en banc court has now reaffirmed, interpreted the claims in light of the specification and found that the defendant did not infringe the claims. We affirmed the district court, which had arrived at a similar conclusion. The dissent from the panel decision relied on the "dictionaries first" procedure, which the court now has decided not to follow. Thus, while

the claim construction issue had to be decided by the en banc court, I see no reason for the court, having reaffirmed the principle on which the district judge and the panel originally decided the case, to send it back for further review.

The court premises its reverse-and-remand decision on the concept of claim differentiation and the reasoning that the contested term "baffle" need not fulfill all of the functions set out for it in the specification. Reasonable people can differ on those points. However, the court did not take this case en banc because the full court differed with the panel majority on those disputable criteria. It did so to resolve the claim construction issue, which it has now done so well. Having done so, I believe that it should simply affirm the district court's decision on the merits, consistently with that court's rationale and that of the panel that affirmed the district court, which it now adopts.

I will not critique in detail particular statements the majority makes in rationalizing its reversal of the district court's decision, such as "that a person of skill in the art would not interpret the disclosure and claims of the '798 patent to mean that a structure extending inward from one of the wall faces is a 'baffle' if it is at an acute or obtuse angle, but is not a 'baffle' if it is disposed at a right angle," or that "the patent does not require that the inward ex tending [sic] structures always be capable of performing that function [deflecting projectiles]" in order to be considered 'baffles'.

I will simply point out that the specification contains no disclosure of baffles at right angles. Moreover, as the majority correctly states, a patent specification is intended to describe one's invention, and it is essential to read a

specification in order to interpret the meaning of the claims. This specification makes clear that the "baffles" in this invention are angled. There is no reference to baffles that show them to be other than angled. The abstract refers to "bullet deflecting . . . baffles." Only angled baffles can deflect. It then mentions "internal baffles at angles for deflecting bullets." That could not be clearer. The specification then refers several times to baffles, often to figures in the drawings, all of which are to angled baffles. A compelling point is that the only numbered references to baffles (15, 16, 26, 27, 30, and 31) all show angled baffles.

The specification further states that steel panels "form the internal baffles at angles for deflecting bullets." It states that the baffles are "disposed at such angles that bullets which might penetrate the outer steel panels are deflected." It explains that if bullets "were to penetrate the outer steel wall, the baffles are disposed at angles which tend to deflect the bullets." There is no specific reference in this patent to a baffle that is not angled at other than 90°.

While, as the majority states, the specification indicates that multiple objectives are achieved by the invention, none of the other objectives is dependent upon whether the baffles are at other than a 90° angle, whereas the constantly stated objective of deflection of bullets is dependent upon such an angle.

Finally, even though claim construction is a question of law, reviewable by this court without formal deference, I do believe that we ought to lean toward affirmance of a claim construction in the absence of a strong conviction of error. I do not have such a conviction in this case, after

considering the district court's opinion and the patent specification.

For these reasons, while I wholeheartedly join the majority opinion in its discussion and resolution of the "specification v. dictionaries" issue, I would affirm the decision below.

MAYER, Circuit Judge, with whom NEWMAN, Circuit Judge, joins, dissenting.

Now more than ever I am convinced of the futility, indeed the absurdity, of this court's persistence in adhering to the falsehood that claim construction is a matter of law devoid of any factual component. Because any attempt to fashion a coherent standard under this regime is pointless, as illustrated by our many failed attempts to do so, I dissent.

This court was created for the purpose of bringing consistency to the patent field. *See* H.R. Rep. No. 312, 97th Cong., 1st Sess. 20-23 (1981). Instead, we have taken this noble mandate, to reinvigorate the patent and introduce predictability to the field, and focused inappropriate power in this court. In our quest to elevate our importance, we have, however, disregarded our role as an appellate court; the resulting mayhem has seriously undermined the legitimacy of the process, if not the integrity of the institution.

In the name of uniformity, *Cybor Corp. v. FAS Technologies, Inc.*, 138 F.3d 1448 (Fed. Cir. 1998) (en banc), held that claim construction does not involve subsidiary or underlying questions of fact and that we are, therefore,

unbridled by either the expertise or efforts of the district court.[1] What we have wrought, instead, is the substitution of a black box, as it so pejoratively has been said of the jury, with the black hole of this court. Out of this void we emit "legal" pronouncements by way of "interpretive necromancy"[2]; these rulings resemble reality, if at all, only by chance. Regardless, and with a blind eye to the consequences, we continue to struggle under this irrational and reckless regime, trying every alternative – dictionaries first, dictionaries second, never dictionaries, etc., etc., etc.

Again today we vainly attempt to establish standards by which this court will interpret claims. But after proposing no fewer than seven questions, receiving more than thirty amici curiae briefs, and whipping the bar into a frenzy of expectation, we say nothing new, but merely restate what has become the practice over the last ten years – that we will decide cases according to whatever mode or method results in the outcome we desire, or at least allows us a seemingly plausible way out of the case. I am not surprised by this. Indeed, there can be no workable standards by which this court will interpret claims so long as we are blind to the factual component of the task. *See Cooter & Gell v. Hartmarx Corp.*, 496 U.S. 384, 405 (1990)

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[1] The Supreme Court did not suggest in affirming *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (1995) (en banc), that claim construction is a purely legal question. 517 U.S. 370 (1996). It held only that, as a policy matter, the judge, as opposed to the jury, should determine the meaning of a patent claim. *See Cybor*, 138 F.3d at 1464 (Mayer, C.J., dissenting) (explaining that "the [Supreme] Court chose not to accept our formulation of claim construction: as a pure question of law to be decided de novo in all cases on appeal").

[2] *See The Holmes Group, Inc. v. Vornado Air Circulation Sys., Inc.*, 535 U.S. 826, 833 (2002).

("Fact-bound resolutions cannot be made uniform through appellate review, de novo or otherwise." (quoting *Mars Steel Corp. v. Cont'l Bank N.A.*, 880 F.2d 928, 936 (7th Cir. 1989))).[3]

Federal Rule of Civil Procedure 52(a) states that "findings of fact . . . shall not be set aside unless clearly erroneous, and due regard shall be given to the opportunity of the trial court to judge of the credibility of witnesses." According to the Supreme Court, this "rule means what it says" – that findings of fact, even "those described as 'ultimate facts' because they may determine the outcome of litigation," are to be reviewed deferentially on appeal.[4] *Bose Corp. v. Consumers Union of United States,*

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[3] The question asked but not answered by the court which might have allowed it to cure its self-inflicted wound was: "Question 7. Consistent with the Supreme Court's decision in *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996) and our *en banc* decision in *Cybor Corp. v. FAS Technologies, Inc.*, 138 F.3d 1448 (Fed. Cir. 1998), is it appropriate for this court to accord any deference to any aspect of trial court claim construction rulings? If so, on what aspects, in what circumstances, and to what extent?"

[4] Because some facts are so intertwined with a constitutional standard the Supreme Court has held that *de novo* review is appropriate. For example, whether a defendant has acted with actual malice in a defamation suit is reviewed de novo because, among other reasons, the scope of the First Amendment is shaped and applied by reference to such factual determinations. *Bose*, 466 U.S. at 502 ("[T]he content of the rule is not revealed simply by its literal text, but rather is given meaning through the evolutionary process of common-law adjudication."). Similarly, whether there is reasonable suspicion to conduct an investigatory stop or probable cause to perform a search under the Fourth Amendment are reviewed without deference. *Ornelas v. United States*, 517 U.S. 690, 696 (1996) (holding that the protections afforded by the Fourth Amendment are "fluid concepts that take their substantive content from the particular contexts in which the standards are being assessed"). The reasoning behind these limited exceptions surely does not apply to claim construction. While appearing from the

(Continued on following page)

466 U.S. 485, 498 (1984); *see also Anderson v. Bessemer City*, 470 U.S. 564, 575 (1985) ("[R]eview of factual findings under the clearly-erroneous standard – with its deference to the trier of fact – is the rule, not the exception."); *Pullman-Standard v. United Steel Workers of Am.*, 456 U.S. 273, 287 (1982) ("Rule 52(a) broadly requires that findings of fact not be set aside unless clearly erroneous."); *United States v. United States Gypsum Co.*, 333 U.S. 364, 394 (1948). Even those findings of fact based entirely on documentary evidence are entitled to deference. *Anderson*, 470 U.S. at 574 ("That [Rule 52(a)] goes on to emphasize the special deference to be paid credibility determinations does not alter its clear command: Rule 52(a) 'does not make exceptions or purport to exclude certain categories of factual findings from the obligation of a court of appeals to accept a district court's findings unless clearly erroneous.'" (quoting *Pullman-Standard*, 456 U.S. at 287)). In short, we are obligated by Rule 52(a) to review the factual findings of the district court that underlie the determination of claim construction for clear error.

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perspective of this court's limited sphere of influence to be dreadfully important, claim construction does not implicate a constitutional value. *Cf. Bose*, 466 U.S. at 502 ("[T]he constitutional values protected by the rule make it imperative that judges – and in some cases judges of [the Supreme] Court – make sure that it is correctly applied."). This is illustrated by the fact that the outcome of a patent case, unlike a defamation or illegal search case, has little impact on how future cases are decided or on how future parties behave. *Cf. id.* at 501 n.17 ("Regarding certain largely factual questions in some areas of the law, the stakes – in terms of impact on future cases and future conduct – are too great to entrust them finally to the judgment of the trier of fact."). Even if claim construction did implicate a constitutional value, it, unlike the decisions underlying the First and Fourth Amendments, could readily be reduced, when distinguished from its factual underpinnings, to "a neat set of legal rules." *Ornelas*, 517 U.S. at 695-96 (quoting *Ill. v. Gates*, 462 U.S. 213, 232 (1983)).

While this court may persist in the delusion that claim construction is a purely legal determination, unaffected by underlying facts, it is plainly not the case. Claim construction is, or should be, made in context: a claim should be interpreted both from the perspective of one of ordinary skill in the art and in view of the state of the art at the time of invention. *See Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477 (Fed. Cir. 1998) ("It is the person of ordinary skill in the field of the invention through whose eyes the claims are construed."). These questions, which are critical to the correct interpretation of a claim, are inherently factual. They are hotly contested by the parties, not by resort to case law as one would expect for legal issues, but based on testimony and documentary evidence.[6] During so called *Markman* "hearings," which are often longer than jury trials, parties battle over experts offering conflicting evidence regarding who qualifies as one of ordinary skill in the art; the meaning of patent terms to that person; the state of the art at the time of the invention; contradictory dictionary definitions and which would be consulted by the skilled artisan; the scope of specialized terms; the problem a patent was solving; what is related or pertinent art; whether a construction was disallowed during prosecution; how one of skill in the art would understand statements during prosecution; and on and on. In order to reconcile the parties' inconsistent submissions and arrive at a sound

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[6] That most of the cases now appealed to this court are "summary judgments" is irrelevant. We have artificially renamed findings of fact as legal conclusions; the district courts have dutifully conformed to our fictional characterization, but this does not change the inherent nature of the inquiry. Of course, if the parties do not dispute the material facts, summary judgment is appropriate.

interpretation, the district court is required to sift through and weigh volumes of evidence. While this court treats the district court as an intake clerk, whose only role is to collect, shuffle and collate evidence, the reality, as revealed by conventional practice, is far different.

Even if the procedures employed by the district court did not show that it is engaging in factfinding, the nature of the questions underlying claim construction illustrate that they are factual and should be reviewed in accordance with Rule 52(a). For each patent, for example, who qualifies as one of ordinary skill in the art will differ, just as the state of the art at the time of invention will differ. These subsidiary determinations are specific, multifarious and not susceptible to generalization; as such their resolution in one case will bear very little, if at all, on the resolution of subsequent cases. *See Ornelas*, 517 U.S. at 703 ("Law clarification requires generalization, and some issues lend themselves to generalization much more than others."); *Pierce v. Underwood*, 487 U.S. 552, 561-62 (1988) ("Many questions that arise in litigation are not amenable to regulation by rule because they involve multifarious, fleeting, special, narrow facts that utterly resist generalization." (quoting Maurice Rosenberg, *Judicial Discretion of the Trial Court, Viewed from Above*, 22 Syracuse L. Rev. 635, 662 (1971))); *Icicle Seafoods, Inc. v. Worthington*, 475 U.S. 709, 714 (1986) (rejecting *de novo* review of factual questions, even when outcome determinative). That the determination of the meaning of a particular term in one patent will not necessarily bear on the interpretation of the same term in a subsequent patent illustrates this point; while the term is the same, the underlying factual context is different. It further proves that these questions (e.g., who qualifies as one of ordinary skill in the art and

what was the state of the art at the time of invention, among others) are implicitly being determined in each case; because we refuse to acknowledge either their existence or importance, however, the manner of their resolution is never elucidated. Finally, that claim construction is dependent on underlying factual determinations has been verified by our experience, which shows that reviewing these questions *de novo* has not clarified the law, but has instead "distorted the appellate process, "causing confusion among the district courts and bar. *See Cooter,* 496 U.S. at 404 (quoting *Pierce*, 487 U.S. at 561); *see also Koon v. United States,* 518 U.S. 81, 99 (1996).

Our purely *de novo* review of claim interpretation also cannot be reconciled with the Supreme Court's instructions regarding obviousness. While ultimately a question of law, obviousness depends on several underlying factual inquiries. *Graham v. John Deere Co.,* 383 U.S. 1, 17 (1966); *see also Dennison Mfg. Co. v. Panduit Corp.,* 475 U.S. 809, 811 (1986) (holding that Rule 52(a) requires that the district court's subsidiary factual determinations should be reviewed for clear error); *cf. Graver Tank & Mfg. Co. v. Linde Air Prods. Co.,* 336 U.S. 271, 275 (1949) (holding that validity, while ultimately a question of law, is founded on factual determinations that are entitled to deference). "Under [section] 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved." *Graham*, 383 U.S. at 17.

To a significant degree, each of these factual inquiries is also necessary to claim construction. Before beginning claim construction, "the scope and content of the prior art

[should] be determined," *id.*, to establish context. The "differences between the prior art and the claims at issue [should] be ascertained," *id.*, to better define what the inventor holds out as the invention. And, the foundation for both the obviousness and claim construction determinations is "the level of ordinary skill in the pertinent art." *Id.*; *see Multiform*, 133 F.3d at 1477. These underlying factual considerations receive the level of deference due under Rule 52(a) when considering obviousness, but they are scrutinized *de novo* in the claim construction context. As directed by the Supreme Court, however, it is especially important in the patent field, "where so much depends upon familiarity with specific scientific problems and principles not usually contained in the general storehouse of knowledge and experience," to give deference to the district court's findings of fact. *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 609-10 (1950).

While the court flails about in an attempt to solve the claim construction "conundrum," the solution to our plight is straightforward. We simply must follow the example of every other appellate court, which, regarding the vast majority of factual questions, reviews the trial court for clear error.[6] This equilibrium did not come about as the result of chance or permissive appellate personalities, but because two centuries of experience has shown that the trial court's factfinding ability is "unchallenged." *Salve Regina Coll. v. Russell*, 499 U.S. 225, 233 (1991); *Inwood*, 456 U.S. at 856 ("Determining the weight and credibility of the evidence is the special province of the trier of fact.").

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[6] While jurisprudentially sound, the bar also supports this proposition, as evident by the many amici curiae briefs urging adherence to Rule 52(a).

Time has similarly revealed that it is more economical for the district court to find facts. *Pierce*, 487 U.S. at 560 ("Moreover, even where the district judge's full knowledge of the factual setting can be acquired by the appellate court, that acquisition will often come at unusual expense, requiring the court to undertake the unaccustomed task of reviewing the entire record. . . . ").

Therefore, not only is it more efficient for the trial court to construct the record, the trial court is better, that is, more accurate, by way of both position and practice, at finding facts than appellate judges. *Anderson*, 470 U.S. at 574 ("The rationale for deference to the original finder of fact is not limited to the superiority of the trial judge's position to make determinations of credibility. The trial judge's major role is the determination of fact, and with experience on fulfilling that role comes expertise."); *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 123 (1969). Our rejection of this fundamental premise has resulted, not surprisingly, in several serious problems, including increased litigation costs, needless consumption of judicial resources, and uncertainty, as well as diminished respect for the court and less "decisional accuracy." *Salve*, 499 U.S. at 233. We should abandon this unsound course.[7]

If we persist in deciding the subsidiary factual components of claim construction without deference, there is no reason why litigants should be required to parade their evidence before the district courts or for district courts to

[7] There are some scenarios where it is difficult to weed facts from law, *see Pullman-Standard*, 456 U.S. at 288, but claim construction is not one of them.

waste time and resources evaluating such evidence. It is excessive to require parties, who "have already been forced to concentrate their energies and resources on persuading the trial judge that their account of the facts is the correct one," to "persuade three more judges at the appellate level." *Anderson*, 470 U.S. at 575. If the proceedings before the district court are merely a "tryout on the road," *id.* (quoting *Wainwright v. Sykes*, 433 U.S. 72, 90 (1977)), as they are under our current regimen, it is wasteful to require such proceedings at all. Instead, all patent cases could be filed in this court; we would determine whether claim construction is necessary, and, if so, the meaning of the claims. Those few cases in which claim construction is not dispositive can be remanded to the district court for trial. In this way, we would at least eliminate the time and expense of the charade currently played out before the district court.

Eloquent words can mask much mischief. The court's opinion today is akin to rearranging the deck chairs on the Titanic – the orchestra is playing as if nothing is amiss, but the ship is still heading for Davey Jones' locker.

United States Court of Appeals
for the Federal Circuit

03-1269,-1286

EDWARD H. PHILLIPS,
Plaintiff-Appellant,
v.
AWH CORPORATION,
HOPEMAN BROTHERS, INC., and
LOFTON CORPORATION,
Defendants-Cross Appellants.

Carl F. Manthei, Attorney at Law, of Boulder, Colorado, argued for plaintiff-appellant.

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Appealed from: United States District Court for the District of Colorado

Judge Marcia S. Krieger

DECIDED: April 8, 2004

Before NEWMAN, LOURIE, and DYK, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* LOURIE. Opinion dissenting in part filed by *Circuit Judge* DYK.

Edward Phillips appeals from the decision of the district court granting the defendants' motion for summary judgment of noninfringement of U.S. Patent 4,677,798. *Phillips v. AWH Corp.*, No. 97-MK-212 (D. Colo. Jan. 22, 2003) ("*Noninfringement Decision*"). Phillips also

appeals from the dismissal of his claim of trade secret misappropriation. *Phillips v. AWH Corp.*, No. 97-N-212 (D. Colo. Mar. 22, 1999) ("*Trade Secret Misappropriation Decision*"). For the reasons set forth below, we affirm.

BACKGROUND

Phillips is the inventor and owner of the '798 patent, which is directed to vandalism-resistant building modules consisting of modular wall panels. The invention is useful in the field of prison construction because the panels exhibit desirable sound and fire resistance, impact resistance (*i.e.*, against bullets, bombs), and axial and lateral load bearing qualities. A key issue in this case relates to the meaning of the term "baffle." The use of the term "baffle" is typified in Claim 1, which reads as follows:

> Building modules adapted to fit together for construction of fire, sound and impact resistant security barriers and rooms for use in securing records and persons, comprising in combination, an outer shell . . . , sealant means . . . , and *further means disposed inside the shell for increasing its load bearing capacity comprising internal steel baffles extending inwardly from the steel shell walls.*

'798 patent, col. 6, ll. 22-34 (emphasis added).

In 1989, Phillips entered into an agreement with AWH Corporation, Hopeman Brothers, Inc., and Lofton Corporation (collectively "AWH") for AWH to market and sell Phillips' invention. That agreement ended in 1990, and in early 1991, Phillips obtained an AWH sales brochure which convinced him that AWH was continuing to use Phillips' technology without his consent. From January

1991 to June 1992, the parties exchanged letters regarding Phillips' allegations of patent infringement and trade secret misappropriation, but no resolution was ever reached.

On February 3, 1997, Phillips sued AWH in the United States District Court for the District of Colorado, asserting that AWH had misappropriated his trade secrets and had infringed claims 1, 21, 22, 24, 25, and 26 of the '798 patent. In March 1999, the court granted AWH's motion for partial summary judgment that Phillips' claim for trade secret misappropriation was barred by Colorado's three-year statute of limitations, and it dismissed that claim. The court reasoned that Phillips knew or should have known of his alleged injury and failed to exercise due diligence in pursuing his claim of misappropriation. *Trade Secret Misappropriation Decision*, slip op. at 7. The court also decided that Phillips had not presented evidence that AWH engaged in wrongful conduct preventing him from discovering that claim. *Id.* at 7-8.

In November 2002, the district court issued its construction of the '798 patent's claims. *Phillips v. AWH Corp.*, No. 97-MK-212 (D. Colo. Nov. 22, 2002) ("*Claim Construction Order*"). The term "baffle" was of primary importance, and although it was not expressly defined in the written description, the parties stipulated that the term meant a "means for obstructing, impeding, or checking the flow of something." *Id.*, slip op. at 23. In spite of that stipulation, the court concluded that the term was ambiguous because "it does not identify the substance or force the flow of which it is intended to check, impede, or obstruct." *Id.* Although the court acknowledged that "[t]he subject language includes a means and a structure," it decided that the claim language "does not adequately

describe the *function* of the structure." *Id.* at 23-24 (emphasis added). The district court therefore concluded that the claim contains means-plus-function language subject to construction under 35 U.S.C. § 112, ¶ 6 and is limited by the specification. *Id.* at 24.

The court found that the specification referred to properties of sound and heat resistance, as well as fire resistance and projectile deflection. Particularly, the court noted that "every textual reference in the Specification and its diagrams show baffle deployment at an angle other than 90° to the wall faces," and that the figures in the specification all displayed baffles placed in interlocking positions. *Id.* The court therefore concluded that a "baffle," within the context of the '798 patent, has two required properties: first, baffles extend inward from the shell walls at oblique or acute angles; and second, baffles form an intermediate, interlocking barrier in the interior of the wall module. *Id.* at 25.

Phillips conceded that he could not prove infringement under the court's claim construction, and the court granted AWH's motion for summary judgment of noninfringement. *Noninfringement Decision*, slip op. at 1. Phillips timely appeals from both the summary judgment of noninfringement and the dismissal of his trade secret misappropriations claim. AWH cross-appeals, challenging the district court's treatment of certain claim terms in its claim construction. We have jurisdiction over the appeals pursuant to 28 U.S.C. § 1295(a)(1), because a claim of patent infringement was well-pleaded in the complaint. *See Holmes Group, Inc. v. Vornado Air Circulation Sys., Inc.*, 535 U.S. 826 (2002). We have pendent jurisdiction over the claim of trade secret misappropriation. *See Roton*

Barrier, Inc. v. Stanley Works, 79 F.3d 1112, 1116 (Fed. Cir. 1996).

DISCUSSION

We review a district court's grant of summary judgment *de novo*, reapplying the same standard used by the district court. *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 149 F.3d 1309, 1315 (Fed. Cir. 1998). Summary judgment is appropriate "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed. R. Civ. P. 56(c).

I. Patent Infringement

Determination of patent infringement requires a two-step analysis. "First, the court determines the scope and meaning of the patent claims asserted . . . , then the properly construed claims are compared to the allegedly infringing device." *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc) (citations omitted). Step one, claim construction, is an issue of law, *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996), that we review *de novo*, *Cybor*, 138 F.3d at 1456. Step two, comparison of the claim to the accused device or method, requires a determination that every claim limitation or its equivalent is found in the accused device. *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 29 (1997). Those determinations are questions of fact. *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998).

On appeal, Phillips argues that the term "baffle" is not in means-plus-function language and should not be limited to structures described in the specification. Instead, he urges that the "heavy presumption" that "baffle" should be accorded its ordinary and customary meaning was not clearly and unequivocally rebutted. Phillips asserts that the district court improperly read limitations from the specification into the claims – that baffles must be positioned at an acute or obtuse angle to wall faces, and that baffles must form an intermediate, interlocking barrier. Next, for support, Phillips points to descriptions in the '798 patent of baffles that he states are at an angle of 90° to the wall face and of baffles that do not form an interlocking pattern. Finally, Phillips asserts that the district court improperly defined the term "impact resistance" to refer only to deflection of bullets, bombs, or other projectiles. He argues that the term "impact" is used in both the conjunctive and the disjunctive with the term "projectile deflection," which he believes indicates that the term "impact" takes on a broader meaning and that the court's construction was unduly narrow.

AWH responds that the district court correctly construed the term "baffle." The court, AWH argues, properly looked to the specification to determine the scope of the claimed invention. To support the court's construction, AWH emphasizes statements in the '798 patent that purport to distinguish the invention from the prior art, *e.g.*, "impact resistance to great forces such as explosions and projectiles." AWH asserts that the key innovative feature of the invention is the baffle configuration, including both the angled orientation and the interlocking pattern limitations, and that the court was correct to interpret the scope of the claims accordingly. Additionally,

AWH argues that the term "impact resistance" is used throughout the specification with particular reference to bullets, bombs, and other projectiles.

We agree with AWH that the district court ultimately construed the meaning of the term "baffle" properly. Section 112, ¶ 6 provides that:

> an element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112, ¶ 6 (2000). Whether a claim limitation is in means-plus-function format according to 35 U.S.C. § 112, ¶ 6 is a matter of claim construction and thus a question of law that we review *de novo*. *Personalized Media Communications, LLC v. Int'l Trade Comm'n*, 161 F.3d 696, 702 (Fed. Cir. 1998). We have held that use of the word "means" creates a presumption that § 112, ¶ 6 applies. *See York Prods., Inc. v. Cent. Tractor*, 99 F.3d 1568, 1574 (Fed. Cir. 1996). Conversely, we have also held that the failure to use the word "means" creates a presumption that § 112, ¶ 6 does not apply. *See Mas-Hamilton Group v. LaGard, Inc.*, 156 F.3d 1206, 1213 (Fed. Cir. 1998). "In deciding whether either presumption has been rebutted, the focus remains on whether the claim as properly construed recites sufficiently definite structure to avoid the ambit of § 112, ¶ 6." *Personalized Media Communications*, 161 F.3d at 704.

At the outset, we determine that "baffle" is not in means-plus-function language. The claim term in question

does not expressly use the word "means,"[1] thereby invoking the presumption that § 112, ¶ 6 does not apply. Moreover, the word "baffle" is a sufficient recitation of structure, which carries its ordinary meaning of "something for deflecting, checking, or otherwise regulating flow." *Webster's Third New International Dictionary* 162 (1993). Its particular structure is not relevant here. Simply because the claims do not identify the matter upon which the baffle acts does not, by itself, rebut that presumption or render the term subject to means-plus-function treatment. Our case law has focused on the structure of claim terms when determining whether § 112, ¶ 6 applies. *See, e.g., Personalized Media Communications*, 161 F.3d at 705 (stating that "an adjectival qualification . . . placed upon otherwise sufficiently definite structure . . . does not make the sufficiency of that structure any less sufficient for purposes of § 112, ¶ 6," but rather "further narrows the scope of those structures covered by the claim and makes the term more definite"). Furthermore, the intrinsic and extrinsic evidence fully and repeatedly support the meaning that baffles check, impede, and obstruct heat, sound, and projectiles such as bullets and bombs. Accordingly, we decide that "baffle" is not means-plus-function language.

However, our analysis does not end there – while the district court erroneously considered the term "baffle" to be in means-plus-function format, we must still read the claims in view of the specification and determine whether

[1] While coincidental, the use of the word "means" in the stipulated definition of "baffle" does not automatically invoke means-plus-function treatment. The district court was not baffled by that usage and was correct not to rely on that word in its reasoning.

the patentee has otherwise limited the scope of the claims with respect to the term "baffle." The ordinary meaning of a term must be considered in view of the intrinsic evidence: the claims, the specification, and the prosecution history. *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342-43 (Fed. Cir. 2001). "[A] claim term will not carry its ordinary meaning if the intrinsic evidence shows that the patentee distinguished that term from prior art on the basis of a particular embodiment, expressly disclaimed subject matter, or described a particular embodiment as important to the invention." *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366-67 (Fed. Cir. 2002). Thus, we look to the specification "to ascertain the meaning of a claim term as it is used by the inventor in the context of the entirety of his invention." *Comark Communications v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998).

The '798 patent specification is rife with references to impact resistance, especially against projectiles such as bullets and bombs. The abstract describes the invention as "[v]andalism resistant building modules . . . [that] provide . . . significant resistance to noise, fire and impact" and specifically states that "[t]he modules contain strengthening and bullet deflecting internally directed steel baffles." It further explains that steel panels "form the internal baffles at angles for deflecting bullets." In the section marked "Disclosure of the Invention," the patentee states that the baffles are "disposed at such angles that bullets which might penetrate the outer steel panels are deflected." '798 patent, col. 2, ll. 13-15.

Additionally, the specification addresses and distinguishes the prior art, asserting that "[i]n secured facilities, and protective barriers, it is feasible that projectiles may be encountered, such as bullets from high powered guns or

bomb fragments." *Id.* at col. 3, ll. 26-28. It continues by stating that "[t]here have not been effective ways of dealing with these powerful impact weapons with inexpensive housing in the prior art." *Id.* at col. 3, ll. 28-31.

The specification further contains a Figure 6, explaining that if bullets "were to penetrate the outer steel shell wall, the baffles are disposed at angles which tend to deflect the bullets." *Id.* at col. 5, ll. 17-19. Figure 12 is also shows that "[t]ypical wall characteristics include bullet and explosion resistance." *Id.* at col. 5, ll. 67-68. Finally, the patentee concludes that the "invention has advanced the art by providing modular buildings and modules of high strength [and] bullet resistance," adding that "[u]niquely the advantages of steel shell modules are combined with thermal and acoustical isolation of two spaced walls and protection against *bullet penetration of the walls*." *Id.* at col. 6, ll. 10-17 (emphasis added).

We are not persuaded by Phillips' arguments that the specification also contains descriptions of baffles that are 90° to the wall face. To support his assertion, Phillips points to segments of baffles in Figure 7 as oriented perpendicular to the walls. However, those segments merely support the predominant angled portions that impart the bullet deflection properties that Phillips identifies as essential to his invention and are not identified as baffles.

From the specification's explicit descriptions of the invention, we conclude that the patentee regarded his invention as panels providing impact or projectile resistance and that the baffles must be oriented at angles other than 90°. Baffles directed at 90° cannot deflect projectiles as described in the '798 patent, and, in any event, are

disclosed in the prior art. *See, e.g.*, U.S. Patents 2,717,664 and 4,505,101. The term "baffle" is used in a consistent manner throughout all the asserted claims, so our foregoing analysis applies equally to all those claims. Because we so construe the '798 patent, and because AWH does not use acute or obtuse angles in its panels, we affirm the district court's judgment of noninfringement.

The dissent-in-part argues that we have interpreted the claims erroneously by focusing only on the "preferred embodiment." We disagree. Inspection of the patent shows that baffles angled at other than 90° is the *only* embodiment disclosed in the patent; it is the invention. It is impossible to derive anything else from the specification.

The specification indicates at column 1, line 65 to column 2, line 15 under DISCLOSURE OF THE INVENTION that

> This invention provides modular equipment for formulating detention structures comprising of [sic] a multiplicity of interchangeable modules of similar size having steel plate inner and outer wall sections defining end closures and internally directed load supporting baffles. The modules comprise three steel plate wall panel sections of partially triangular cross section shape positioned to provide the internally directed baffles. . . .
>
> The baffles provided by the triangular shaped panels to extend inwardly from an intermediate interlocking barrier with the baffles disposed at such angles that bullets which might penetrate the outer steel panels are deflected.

The only actual references to baffles in the specification are to numbers **16**, **26**, **27**, **30**, **31**, all of which are

angled in the figures of the patent. It further states at column 5, lines 5-19: "*The* additional feature of this module is that it gives additional protection against projectile penetration. Thus it may been seen from FIG. **6** that if a bullet were to penetrate the outer steel shell wall, the bullets are disposed at angles which tend to deflect the bullets." (Emphasis added.) None of the figures shows any baffle that is not angled at an angle other than 90°.

It is true that claims with the non-restrictive term "baffles" were allowed. However, the patent specification is intended to support and inform the claims, and here it makes it unmistakably clear that the invention involves baffles angled at other than 90°. It is in the interests of a sound patent system and inventors, as well as the public, to hold inventors to their disclosures. The trial judge correctly perceived this need, albeit mistakenly relying on the means-plus-function ground, and interpreted the claims in accordance with the specification.

II. Misappropriation of Trade Secrets

The district court dismissed the plaintiff's claim of misappropriation of trade secrets on a statute of limitations ground. We agree with the court's decision on that basis. Federal courts apply the trade secret law of the state in which they sit. *See Water Techs. Corp. v. Calco, Ltd.*, 850 F.2d 660, 670 (Fed. Cir. 1988); *Sun Studs, Inc. v. Applied Theory Assocs., Inc.*, 772 F.2d 1557, 1561 (Fed. Cir. 1985). The Colorado Uniform Trade Secrets Act ("CUTSA"), Colo. Rev. Stat. §§ 7-74-101 to -110 (1998), applies to claims of trade secret misappropriation brought under Colorado law, including those in federal courts. *Gates Rubber Co. v. Bando Chem. Indus., Ltd.*, 9 F.3d 823,

847 (10th Cir. 1993). Here, there is no dispute between the parties that Colorado trade secret law controls. The district court's interpretation of Colorado trade secret law is a matter of law that we review *de novo*. *See Salve Regina Coll. v. Russell*, 499 U.S. 225, 231 (1991).

Colorado state law provides a three-year statute of limitations period for claims of trade secret misappropriation.

> An action for misappropriation of a trade secret shall be brought within three years after the misappropriation is discovered or by the exercise of reasonable diligence should have been discovered. For purposes of this section, a continuing misappropriation constitutes a single claim.

Colo. Rev. Stat. § 7-74-107 (1998). The Colorado Supreme Court has stated, with respect to actions in tort, that "[t]he statute of limitations begins to run when the claimant has knowledge of facts which would put a reasonable person on notice of the nature and extent of an injury and that the injury was caused by the wrongful conduct of another." *Mastro v. Brodie*, 682 P.2d 1162, 1168 (Colo. 1984). "[T]he cause of action does not accrue until the plaintiff knows, or has reason to know, in the exercise of reasonable diligence, all material facts essential to show elements of that cause of action." *City of Aurora v. Bechtel Corp.*, 599 F.2d 382, 389 (10th Cir. 1979).

Phillips argues that he did not "discover" AWH's alleged misappropriation until August 1996 so that the three-year statute of limitations did not expire before he filed the lawsuit. He asserts that the 1991 and 1992 correspondence lacked particular details of AWH's alleged use of Phillips' technology and that Phillips was unable to

discern the true nature of his injury. Phillips advances the argument that accrual of the tort of trade secret misappropriation under Colorado law occurs only when both the injury and its cause are known. Because he did not know of AWH sales of the accused technology until August 1996, Phillips alleges that he could not determine recoverable damages and that his claim was incomplete. Moreover, Phillips raises equitable tolling arguments based on mental disability and AWH's assurances that it was not using Phillips' technology.

In response, AWH highlights the strong, specific language Phillips used in his 1991 and 1992 letters, all of which indicate that his awareness of possible trade secret misappropriation had risen well above mere suspicion. AWH argues that in his letters, Phillips indicated with particularity the technology that he believed AWH was misappropriating, citing the AWH sales brochure that Phillips had in his possession. The appellees further assert that under Colorado state law, mental disability must exist at the time such right accrues for equitable tolling to operate. AWH states that its assurances to Phillips amounted to mere denial of liability and not wrongful conduct implicating the doctrine of equitable tolling.

We agree with the district court that Phillips' claim of trade secret misappropriation is time-barred by Colorado state law. Phillips possessed an AWH sales brochure that detailed the companies' alleged use of his technology and prompted correspondence between the parties. In his letters to AWH, Phillips referred to the brochure's contents, identified specific technology that he believed was being used without his permission, and detailed an explicit timeline of events leading to AWH's alleged misappropriation. Phillips even used terms such as "steal" and "misappropriated,"

indicating that he was very much aware of AWH's actions, how they related to his technology, and how they affected his own interests, financial or otherwise. Phillips' possession of the AWH brochure and his letters convincingly indicate that Phillips knew or should have known facts sufficient to support his claim of misappropriation. That Phillips was not aware of the particular use of his technology, of AWH's specific sales, or of the exact monetary damage inflicted is not of consequence. One does not need to know the specific damage inflicted in order to bring a claim. *See* Colo. Rev. Stat. § 7-74-107 (1998); *Gates Rubber Co.*, 9 F.3d at 847. As a result, we conclude that Phillips' claim for trade secret misappropriation accrued prior to the critical date, February 3, 1994 – three years before the commencement of suit in the district court, and hence out of time.

As for Phillips' equitable tolling arguments, we are not convinced that his alleged mental disability warrants exercise of the doctrine of equitable tolling because it did not exist when Phillips discovered the alleged misappropriation. *See* Colo. Rev. Stat. § 13-81-103 (2002). Furthermore, courts interpreting Colorado law have held that "[t]he mere denial of liability, which is what an assertion of independent development amounts to in the face of a trade secret misappropriation claim, is not 'wrongful conduct' which implicates the doctrine of equitable tolling." *Chasteen v. UNISIA JECS Corp.*, 216 F.3d 1212, 1221 (10th Cir. 2000) (citing *Dean Witter Reynolds, Inc. v. Hartman*, 911 P.2d 1094, 1096 (Colo. 1996)). We therefore conclude that equitable tolling does not apply and that Phillips' claim of trade secret misappropriation is barred by Colorado's statute of limitations.

III. Cross-Appeal

AWH disputes several additional claim terms in its cross-appeal. We dismiss the cross-appeal as improper because the district court entered a judgment of noninfringement in favor of AWH. A party has no right of cross-appeal from a decision in its favor. *Lindheimer v. Ill. Bell Tel. Co.*, 292 U.S. 151, 176 (1934). Similarly, a party who prevails on noninfringement has no right to file a "conditional" cross-appeal to introduce new arguments or challenge a claim construction, but may simply assert alternative grounds in the record for affirming the judgment. *Bailey v. Dart Container Corp. of Mich.*, 292 F.3d 1360 (Fed. Cir. 2002); *Datascope Corp. v. SMEC, Inc.*, 879 F.2d 820, 822 n.1 (Fed. Cir. 1989).

CONCLUSION

We have considered Phillips' remaining arguments and find them unpersuasive. We therefore conclude that the district court properly granted summary judgment in favor of AWH on Phillips' patent infringement and trade secret misappropriation claims, and we accordingly affirm. We dismiss AWH's cross appeal as improper and, in any event, moot.

AFFIRMED.

DYK, *Circuit Judge*, dissenting-in-part.

I respectfully dissent from the majority's affirmance of the district court's judgment of non-infringement. The majority decision effectively limits the claims to the preferred embodiment, contrary to our recent decision in

Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898 (Fed. Cir. 2004), and numerous other decisions of this court. In doing so, the majority decision attempts to work a major and unfortunate change in our recent claim construction jurisprudence.

The issue here is the meaning of the claim term "baffles," which appears in each of the asserted claims of the '798 patent. I agree that "baffles" is not a means-plus-function term because, as the majority notes, "the word 'baffle' is a sufficient recitation of structure." *Ante* at 7. There is no dispute as to the plain meaning of the term "baffles." The parties have stipulated that "baffles" are a "means for obstructing, impeding, or checking the flow of something." *Phillips v. AWH Corp.*, No. 97-MK-212, slip op. at 23 (D. Colo. Nov. 22, 2002); *see also Webster's Third New International Dictionary* 162 (2002) ("*Webster's*") (defining baffles as "something for deflecting, checking, or otherwise regulating flow"). Indeed, the majority agrees that this is the "ordinary meaning." *Ante* at 7.

My dispute is with the majority's imposition of an additional structural limitation based upon the patentee's preferred embodiments that limits baffles to structures "oriented at angles other than 90°." *Ante* at 10. This is contrary to the plain meaning, and there is no suggestion that the patentee, acting as his own lexicographer, gave a special meaning to the term baffles. The majority marshals three arguments in support of limiting the claims to baffles oriented at angles other than 90°. None is convincing.

First, the majority concludes that baffles must be limited to structures oriented at angles other than 90° because "the patentee regarded his invention" as such,

ante at 9, describing only such baffles in the specification. It states that "baffles angled at other than 90° is the *only* embodiment disclosed in the patent; it is the invention." *Ante* at 10. We however have "expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment." *Liebel*, 358 F.3d at 906.

Our precedent also makes clear that "this court interpret[s] the pertinent claim language narrowly, not merely because the specification d[oes] not describe a broader embodiment, but because the specification, claim, or prosecution history ma[kes] clear that the invention is limited to a particular structure." *Liebel*, 358 F.3d at 907-08. As in *Liebel*, the specification here does "not suggest that [baffles oriented at angles other than 90°] are an essential component of the invention, nor is there any language . . . in the specification, that disclaims the use of the invention in the absence of [baffles oriented at angles other than 90°]." *Id.* at 908; *see also SunRace Roots Enter. Co. v. SRAM Corp.*, 336 F.3d 1298, 1305 (Fed. Cir. 2003). Nor is this a case like *SciMed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc.*, 242 F.3d 1337 (Fed. Cir. 2001), where the specification specifically disclaimed non-disclosed embodiments by stating that the "structure defined above is the basic . . . structure for *all embodiments of the present invention contemplated and disclosed herein*." *Id.* at 1343 (quoting the patents at issue). The specification of the '798 patent contains no such language clearly limiting the claims to a specific structure.

Second, the majority contends that the baffles must be limited to structures oriented at angles other than 90° in order to realize the invention's *purpose* of providing panels that are impact or projectile resistant. The theory for this

departure from the broader plain meaning is that "[b]affles directed at 90° cannot deflect projectiles as described in the '798 patent," *ante* at 10, and projectile deflection is critical because the "specification is rife with references to impact resistance, especially against projectiles such as bullets and bombs," *ante* at 8. The specification however merely identifies impact resistance as one of several objectives of the invention. The patent also identifies other objectives including "high load bearing strength" using "thinner guage [sic] steel panels," '798 patent, col. 3, ll.16-25, and "thermal and acoustical isolation of two spaced walls," *id.* at col. 6, l.16.[1] As we made clear in *Liebel*, "[t]he fact that a patent asserts that an invention achieves several objectives does not require that each of the claims be construed as limited to structures that are capable of achieving all of the objectives." 358 F.3d at 908; *see also E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1370 (Fed. Cir. 2003). So too, "[a]bsent a clear disclaimer of particular subject matter, the fact that the inventor may have anticipated that the invention would be used in a particular way does not mean that the scope of the invention is limited to that context." *Liebel*, 358 F.3d at 909 (quoting *Northrop Grumman Corp. v. Intel Corp.*, 325 F.3d 1346, 1355 (Fed. Cir. 2003)) (alteration in orginal). Here baffles that are oriented at 90°, and thus excluded under the majority's construction, would still achieve the load bearing and thermal-acoustical isolation objectives taught in the specification. The identification of an objective that is not met when the claim is given its ordinary meaning is

[1] This "thermal and acoustical isolation" refers to the lack of a continuous link across the interior of the panels. Since the baffles on each side of the panel's interior do not physically touch, the flow of sound and heat from one side to the other is restricted.

not in itself a disclaimer sufficient to narrow that ordinary meaning. This is particularly so here where impact or projectile resistance is separately identified as a claim limitation in claims 1-21, 23 and 24, thereby suggesting that the baffles and impact resistance limitations are separate.

Finally, the majority relies on the fact that "[b]affles directed at 90° . . . in any event, are disclosed in the prior art," *ante* at 10, perhaps suggesting that the claim would be invalid if given a broader meaning. But the fact that a feature of the invention may have been described in the prior art hardly raises serious questions of invalidity. *See, e.g., Schering Corp. v. Geneva Pharms., Inc.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003) ("[A]nticipation [occurs] if a single prior art reference discloses *each and every* limitation of the claimed invention." (emphasis added)). Even if there were such questions, this also is no excuse to depart from the plain meaning of the claims. The "axiom" that claims should be construed to preserve validity is not an invitation to narrowly construe unambiguous claim language contrary to its plain meaning. *See, e.g., Liebel*, 385 F.3d at 911; *Elekta Instrument S.A. v. O.U.R. Scientific Int'l, Inc.*, 214 F.3d 1302, 1309 (Fed. Cir. 2000). Nor, was there here an effort to distinguish the prior art on the basis that prior art baffles were oriented at 90° angles. *See SciMed*, 242 F.3d at 1343.

Simply put, there is no reason to supplement the plain meaning of the claim language with a limitation from the preferred embodiment. By limiting "baffles" to structures "oriented at angles other than 90°," *ante* at 10, the majority has misconstrued not only the claims, but our precedent as well. Limiting the claims to the preferred embodiment as the majority has done is quite inconsistent

with our cases which consistently reject the notion that the claims are limited to the preferred embodiment. *Liebel*, 358 F.3d at 906, *see also, e.g.*, *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1091 (Fed. Cir. 2003); *E-Pass*, 343 F.3d at 1369; *Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1373 (Fed. Cir. 2003); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1327 (Fed. Cir. 2002).

II

Discarding the majority's approach of limiting the claims to the preferred embodiment, the question remains as to the correct construction of the claims. Since there is no argument here that one of skill in the art would ascribe a specialized meaning to the term baffles, and there has been no disclaimer in the specification or prosecution history, the general purpose dictionary definition, "something for deflecting, checking, or otherwise regulating flow," *Webster's* at 162, applies. *See Texas Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1203-04 (Fed. Cir. 2002); *see also, e.g.*, *Kumar v. Ovonic Battery Co.*, 351 F.3d 1364, 1367 (Fed. Cir. 2003); *E-Pass Techs.*, 343 F.3d at 1367-68.

The district court's grant of summary judgment should be vacated because it was based solely on the erroneous construction of baffles and the patentee's concession that the accused product did not contain baffles as so defined. I do not reach the district court's construction of other claim terms or the question of whether summary judgment of non-infringement could or should be granted on other grounds. I agree with the majority opinion on the trade secret claim.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Honorable Marcia S. Krieger

Case No. 97-MK-212 (CBS)

EDWARD H. PHILLIPS,

Plaintiff(s),

v.

AWH CORPORATION, et al.,

Defendant(s).

ORDER

(Filed May 9, 2002)

THIS MATTER comes before the Court on Defendant's Motion for Summary Judgment on Patent Infringement, Plaintiff's Motion for Summary Judgment on Literal Infringement, Damages, and Willfulness, and Plaintiff's Motion for Summary Judgment on Anticipation. Having reviewed the motions, responses and replies, and after hearing arguments by counsel on May 8, 2002, the Court

FINDS that:

1. On Defendant's Motion for Summary Judgment on Patent Infringement, the *Markman* hearing was conducted on October 3, 2000 but no ruling was ever made prior to the case reassignment on February 14, 2002, therefore no *Markman* determination has been made.

2. There is a genuine issue as to material facts regarding the attributes of the allegedly infringing product in the Eastman, Forsyth, Lee, Mahoning and Pulaski

Counties which must be tried. Thus, no judgment can be rendered as to the issue of patent infringement.

3. On Plaintiff's Motion for Summary Judgment on Literal Infringement, Damages, and Willfulness, given that factual issues are in dispute with regard to the literal infringement claim, no judgment can be rendered as to damages or willfulness.

4. On Plaintiff's Motion for Summary Judgment on Anticipation, no judgment can be rendered as to the issue of anticipation due to the absence of a *Markman* determination.

5. Although judgment cannot be entered on any of the pending motions for summary judgment, the following undisputed facts are treated as established for purposes of trial:

   a. Since 1990, the Hopeman companies have participated in seven jail construction projects that involved the use of modular steel wall panels in the construction of cells. These projects are summarized as follows: Hart County, project date 1991, number of cells 24; Elbert County, project date 1991, number of cells 24; Eastman County, project date 1991, number of cells 100; Forsyth County, project date 1991, number of cells 736; Lee County, project date 1993, number of cells 68; Mahoning County, project date 1993, number of cells 446; Pulaski County, number of cells 192.

   b. The wall panels used for the Hart, Elbert and Eastman projects were essentially the same. The wall panel is depicted in Defendant's Motion for Summary Judgment, Section II, paragraph 2.

   c. The wall panels used for the Hart, Elbert and Eastman projects utilized a unique end configuration for joining one panel to another.

d. The wall panels used for the Hart, Elbert and Eastman projects utilized a stiffener system to support the exterior wall panels where the stiffeners extend inwardly perpendicular to the walls of the panel and are interlocked. The stiffeners are prevented from touching each other by the use of a non-combustible, vermipan spacer.

e. The photographs of a completed jail cell and the process by which the completed jail cells were placed into the poured concrete structure of the jail are depicted in photographs attached as Exhibit A to the affidavit of Charles N. Johnson, Jr. which is attached to Defendant's Motion for Summary Judgment on Patent Infringement.

IT IS THEREFORE ORDERED that:

1. Defendant's Motion for Summary Judgment on Patent Infringement is hereby **DENIED**.

2. Plaintiff's Motion for Summary Judgment on Literal Infringement, Damages and Willfulness is hereby **DENIED**;

3. Plaintiff's Motion for Summary Judgment on Anticipation is hereby **DENIED**;

4. The foregoing facts are deemed established for trial.

Dated this 8th of May, 2002.

BY THE COURT:

/s/ Marcia S. Krieger
Marcia S. Krieger
United States District Court

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

Case No. 97-MK-212 (CBS)

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing **order** was served on May 9, 2002 by:

(X) delivery to:

Magistrate Judge Craig B. Shaffer

( ) e-mail to:

( ) facsimile to:

(X) depositing the same in the United States mail, postage prepaid, addressed to:

Carl F. Manthei
1205 17th St.
Boulder, CO 80302

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Garlin, Driscoll & Murray
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Boulder, CO 80302

JAMES R. MANSPEAKER, Clerk

By /s/ [Illegible]
Deputy Clerk

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Honorable Marcia S. Krieger

Case No. 97-MK-212 (CBS)

EDWARD H. PHILLIPS,

Plaintiff(s),

v.

AWH CORPORATION, et al.,

Defendants.

MEMORANDUM OPINION AND ORDER ON CLAIM CONSTRUCTION FOR '798 PATENT

This action is for patent infringement brought pursuant to Title 35 of the United States Code, particularly 35 U.S.C. § 271 *et. seq.* This matter is before the Court for interpretation and construction of certain disputed claims in patent no. 4, 677, 798 ('798 Patent) held by Edward H. Phillips (Phillips or Plaintiff).

I. JURISDICTION

This Court has jurisdiction pursuant to 28 U.S.C. § 1338(a)(b).

II. PROCEDURAL HISTORY

This action was initiated on February 3, 1997. On October 3, 2000, a "Markman" hearing[1] was conducted following which the parties filed motions for summary judgment. This matter was reassigned to the undersigned on February 14, 2002. At such time, neither the motions for summary judgment nor a claim construction ruling had been made.

Since then, the Court has denied the motions for summary judgment. This ruling is intended to resolve the disputes concerning claim construction for the '798 Patent.

In considering claim construction, the Court has reviewed:

1. The parties' Joint Claim Construction Statement dated November 10, 19997 [sic];
2. The parties' opening briefs regarding claim construction;
3. The reporter's transcript of the Markman hearing conducted on October 3, 2000;
4. All briefs filed in support of and opposition to the parties' motions for summary judgment following the Markman hearing;
5. The exhibits admitted at the Markman hearing and submitted in support and opposition to the motions for summary judgment;

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[1] This is the common vernacular for a claim construction hearing required by the United States Supreme Court in *Markman v. Westview Instruments*, 517 U.S. 370 (1996).

6. The parties' supplemental briefs on claim construction filed, at the Court's request, on May 31, 2002.

The Defendants have requested the opportunity for further oral argument. In light of the well presented, voluminous arguments already made by the parties, the Court finds that further oral argument is not necessary.

III. ISSUE

In this action, Phillips contends that the Defendants have infringed upon Claims 1, 21, 22, 24, 25 and 26 of the '798 Patent in constructing various prison facilities. The Defendants respond that there is no infringement because the device described in the '798 Patent is different than that utilized by Defendants. At issue is the meaning of Claims 1, 21, 22, 25 and 26 of the '798 Patent.

IV. PATENT AND PROSECUTION HISTORY

The '798 Patent entitled "Steel Shell Modules for Prisoner Detention Facilities" describes a method of constructing metal, modular wall panels for use in prison facilities. The '798 Patent reflects an invention designed to create "vandalism resistant building modules suitable for detention and secured storage facilities". (Plaintiffs Exhibit 1, Abstract.)

At the time of submission of the '798 Patent, modular construction of prison facilities involved two methods – "sandwich panels" (Exhibit 9) or "steel stud panels" (Exhibit 8). The sandwich panel had two outer faces of thin metal skin used to enclose insulation. Such panels worked well in controlling temperature and sound, but lacked

sufficient rigidity to bear loads of any kind and could not be fire rated because the panels collapsed too quickly. (Markman Transcript, p. 35, Lines 12-25 to p. 36, ln. 6; and Exhibit 12.) Steel stud walls had metal outer faces with metal interior studs that linked the wall faces to each other. The steel stud walls provided improved rigidity for load bearing, but the studs and end pieces of each panel created a thermal-acoustical path which allowed excessive heat and sound transmission to be transmitted from one face of the panel to the other. (Markman Transcript, p. 36, ln. 21 to p. 37, ln. 10; and Exhibit 12.)

The Phillips invention was designed to retain the load bearing capabilities of the steel stud wall but to eliminate the thermal-acoustical path from one face of the panel to the other created by the studs and the end pieces of each panel. Philips accomplished this in two ways. First, in his invention, the ends of each modular panel do not use steel-to-steel contact to link the faces to each other. Instead, the end of a module is formed by bending the module's face toward the interior of the panel and a thermal acoustical sealant is used to join the bent end of the panel to the opposing face wall. Second, the invention utilizes baffles in the interior of each wall, but such baffles do not connect one face to the other. The internal baffles are directed at angles other than 90° to the wall face which provides resistance to bullets and other projectiles that impact the wall.

In the Specification for Patent '798, Philips describes the invention as follows:

> This invention provides modular equipment for formulating detention structures comprising of a multiplicity of interchangeable modules of similar size having steel plate inner and outer

wall sections defining end closures and internally directed load supporting baffles. The modules comprise three steel plate wall panel sections of partially triangular cross section shape positioned to provide the internally directed baffles and the end-closure walls. Modules of a size that may be manually processed are abutted together end to end in registration and welded together along two weld lines to form walls for the detention structure. The ends are indented so that the two weld lines at the wall section surfaces are the sole lines of registered contact.

The baffles provided by the triangular shaped panels to extend inwardly form an intermediate interlocking barrier with the baffles disposed at such angles that bullets which might penetrate the outer steel panels are deflected. Flanges are formed between the inner and outer wall panels between which a ropelike insulating seal is compressed to isolate the two walls. Two different kinds of filler insulating material may be inserted on opposite sides of the intermediate layer to increase the versatility of the modules. Thus, insulation properties, impact properties or load bearing properties may be emphasized by the appropriate filler materials.

Accordingly jail or other detention structures may have substantially sound, impact and fire resistant characteristics. Thus, vandalism resistance is provided. The exterior steel plate walls are smooth and strong and easy to decorate and maintain. The modules may carry utility instruments and utility flow lines. This construction is also ideal for storage vault use, safety barriers and other secure facilities.

(Plaintiffs Exhibit 1, Column 1, Line 65 – Column 2, Line 31.)

The original patent and a later amendment are accompanied by eighteen diagrams, six of which display the internal configuration of the modular wall. (Abstract and Figures 2, 4, 5, 6 and 7). Seven diagrams display how the end abuttments [sic] attach to the face walls of the modules. (Abstract and Figures 2, 3, 4, 5, 6 and 7). All of the diagrams display the internal baffles extending from an acute or oblique angle to the wall faces. No diagram shows a baffle extending internally at a right angle to a face wall in a T-shaped form or connecting the two wall faces. All diagrams showing the end abuttment [sic] of the module display the bending of one wall face to create the end piece. None of the figures are identified as a "preferred" or "best" mode.

Patent '798 contains 26 Claims. The original application was submitted on April 14, 1986. In this submission, neither Claim 1 nor Claim 18 referred to baffles. As a result, on September 25, 1986, the United States Patent and Trademark Office rejected Claims 1 and 18 as being "unpatentable over a prior patent" (Patent 3,899,043) and rejected Claims 2 through 17 being dependent upon a rejected base claim (Claim 1). Claims 19 through 28 were allowable. On December 19, 1986, Philips filed amended Claims 1 through 18. Claim 1 was rewritten to include reference to internal steel baffles and claim 18 was withdrawn. The patent was thereafter approved and issued to Philips on July 7, 1987.

V. ANALYSIS

A. Legal Doctrines Applicable to Claim Interpretation.

Determination of whether a patent is infringed is a two-step analysis. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F. 3d 1359, 1365 (Fed. Cir. 2002). *See also, Johnson Worldwide Assocs. v. Zebco Corp.*, 175 F. 3d 985, 988 (Fed. Cir. 1999). The first step is interpretation or construction of the claim; the second is to determine whether the accused product infringes the claims as interpreted. This decision addresses only the first step.

The Court "must determine as a matter of law the correct scope and meaning of a disputed claim term." *CCS Fitness* at 1365; *Lizardtech, Inc. v. Earth Resource Mapping, Inc.*, 35 Fed. App. 918, 923 (Fed. Cir. 2002) (unpublished) (Claim terms may be "viewed in the context of the invention as a whole and through the lens of one skilled in the relevant art."); *Hoganas AB v. Dresser Indus., Inc.*, 9 F. 3d 948, 952 n. 15 (Fed. Cir. 1993) (citing *Smithkline Diagnostics, Inc. v. Helena Laboratories Corp.*, 859 F. 2d 878, 882 (Fed. Cir. 1988) ("[T]he claims should be construed as one skilled in the art would construe them.")). At this stage, a court construes the claims' meaning without reference to what is known as the "accused device." *See Young Dental Mfg. Co. v. Q3 Special Prods.* 112 F. 3d 1137, 1141 (Fed. Cir. 1997). This issue is exclusively a question of law. *Markman v. Westview Instruments*, 517 U.S. 370 (1996).

The goal of patent claim construction is to spell out in layman's simple language the meaning and the scope of the legal language contained in a patent. The claims of a patent are akin to a contract. *See Doble Engineering Co. v.*

Leeds & Northrop Co., 134 F. 2d 78 (1st Cir. 1943). The claims describe the basic invention, *Autogiro Co. of America v. United States*, 384 F. 2d 391 (Ct. Cl. 1967), and the words in claims are to be given their ordinary meaning in the absence of an indication in the patent to the contrary. *See Gentex Corp. v. Donley Corp.*, 69 F. 3d 527, 530 (Fed. Cir. 1995); *Transmatic, Inc. v. Goulton Industries, Inc.*, 53 F. 3d 1270, 1277 (Fed. Cir. 1995). However, because an inventor is allowed to be his or her own lexicographer, the meaning of the words in a claim may be different from the ordinary meaning. *Intelicall Inc. v. Phonometrics, Inc.*, 952 F. 2d 1384, 1987-88 (Fed. Cir. 1992).

To determine what the words in a claim mean, a court may look to both intrinsic and extrinsic evidence. Intrinsic evidence includes the claims, the specification with drawings and the prosecution history. Extrinsic evidence includes prior art references, dictionaries and expert testimony.

1. Intrinsic Evidence.

The Court begins with the intrinsic evidence because it is "the most significant source of the legally operative meaning of disputed claim language." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F. 3d 1576, 1582 (Fed. Cir. 1996). Only if the intrinsic evidence is ambiguous in delineating the scope of the patent should a court resort to extrinsic evidence. *See Phillips Petroleum Co. v. Huntsman Polymers Corp.*, 157 F. 3d 866, 870 (Fed. Cir. 1998). Intrinsic evidence is composed of the language of the patent claims, the patent specification and drawings, and the prosecution history. *See, Vitronics*, 90 F. 3d at 1582.

a. Claims.

The claims of a patent are the concise formal definition of an invention expressed in numbered paragraphs. The doctrine of claim differentiation presumes that each numbered claim, except as specifically stated in it, stands independently. Thus, each claim defines an invention not only by the words in the particular claim, but also by the absence of terms found in other claims.

The doctrine of claim differentiation precludes the reading of the limitations found in narrower, dependent claims into broader, independent claims. *See Kalman v. Kimberly-Clark Corp.*, 713 F. 2d 760, 770 (Fed. Cir. 1983) *cert. denied* 465 U.S. 1026 (1984); *Wenger Manufacturing, Inc. v. Coating Mach. Sys. Inc.*, 239 F. 3d 1225, 1233 (Fed. Cir. 2001); *Xerox Corp. v. 3M Corp.*, 267 F. 3d 1361, 1366 (Fed. Cir. 2001). Recent opinions, such as those cited above, however, acknowledge that the claim differentiation doctrine applies only in circumstances where a limitation of a dependent claim is the only or primary meaningful difference between it and the independent claim. *See Ecolab, Inc. v. Paraclipse, Inc.*, 285 F.3d 1362, 1375 (Fed. Cir. 2002).

b. Specification and Drawings.

The patent specification describes the invention and often includes diagrams to display its attributes. The specification is generally regarded as the single best guide to the meaning of a disputed claim term. It acts as a dictionary when it expressly or impliedly defines terms used in the patent claims.

> The claims are always construed in light of the specification, of which they are a part. The role of

> the specification includes presenting a description of the technologic subject matter of the invention, while the role of claims is to point out with particularity the subject matter that is patented. The claims are directed to the invention that is described in the specification; they do not have meaning removed from the context from which they arose. Thus the claims are construed to state the legal scope of each patented invention, on examination of the language of the claims, the description in the specification, and the prosecution history.

Netword, LLC v. Centraal [sic] *Corp.*, 242 F. 3d 1347, 1352 (Fed. Cir. 2001) (internal citations omitted).

Two fundamental rules assist the Court in interpreting claims in light of the specification:

> (a) one may not read a limitation into a claim from the written description, but (b) one may look to the written description to define a term already in a claim limitation, for a claim must be read in view of the specification of which it is a part. These two rules lay out the general relationship between the claims and the written description.

Renishaw, 158 F. 3d at 1248.

There are several recognized exceptions to the fundamental rule that the specification should not limit or restrict the meaning of a claim. The first exception applies when the specification describes or displays a single, particular embodiment as the invention, itself. It is generally recognized that the description or diagrams in the patent specification may be narrower than the invention described in the patent claims. This is because the specification "sets forth the best

mode contemplated by the inventor of carrying out his invention." 35 U.S.C. § 112, as compared to all the modes that could be used. A patentee may display only the "best mode" or "preferred embodiment" of the invention in the specification. If the patentee displays only the best mode of the patent in diagrams or the specification this does not ordinarily restrict the meaning of a claim. *See Adams v. United States*, 330 F. 2d 622, 625 (Ct. Cl. 1964) *aff'd* 383 U.S. 39 (1966). If the specification does not identify the described or displayed embodiment in terms of being the "best mode" or "preferred embodiment," and the patentee describes a particular embodiment as the invention, itself, rather than only one way of utilizing the invention, the specification may limit the claim's scope. *See Autogiro*, 384 F.2d at 398.

The specification may also limit the meaning of a claim if (1) the patentee has clearly and unequivocally set forth a special definition for a term in the specification; or (2) the terms used in the claim are so unclear that there is no means by which the scope of the claim can be ascertained from its language. In such events, the language of the specification is controlling. *See Bell Atlantic Network Servs, Inc. v. Covad Communications Group*, 262 F. 3d 1258, 1270-71 (Fed. Cir. 2001); *Johnson Worldwide Assoc., Inc. v. Zebco Corp.*, 175 F. 3d at 990.

Finally, pursuant to 35 U.S.C. § 112, if a claim contains "means-plus-function" language, the specification is used to define and limit the function. This section provides:

> An element in a claim for combination may be expressed as a means or step performing a specified function without the recital of structures, material or acts in support thereof, and such

> claims shall be construed to cover the corresponding structure, material or acts described in the specification and equivalence thereof.

Whether a claim is written in means-plus-function format is a question of law. *Personalized Media Comm., LLC v. ITC*, 161 F. 3d 696, 702 (Fed. Cir. 1998).

The mean-plus-function language is usually triggered when the word "means" appears in a patent claim. However, if the claim language that follows the word "means" designates the structure that performs the function described, such language is not read as a means-plus-function element.

> To invoke this statute [35 U.S.C. § 112], the alleged means-plus-function element must not recite a definite structure which performs the described function. Patent drafters conventionally achieve this by using only the words "means for" followed by a recitation of the function performed.

Coal v. Kimberly-Clark Corp., 102 F. 3d 524, 530-31 (Fed. Cir. 1996).

c. Prosecution History.

The history of the patent's submission, modification and relationship to other patents can also assist in understanding the meaning of disputed claim language. *See Biodex Corp. v. Loredan Biomedical, Inc.*, 946 F. 2d 850, 862 (Fed. Cir. 1991). Because patents are presumed to describe unique inventions, the prosecution history may indicate that certain interpretations of claim language are appropriate to avoid replicating prior art. *See Biodex*, 946 F. 2d at 863; *Builders Concrete, Inc. v. Bremerton Concrete*

Products Co., 757 F.2d 255, 260 (Fed. Cir. 1985) ("[T]he prosecution history of all claims is not insulated from review in connection with determining the fair scope of [a] claim. . . . To hold otherwise would be to exalt form over substance and distort the logic of this jurisprudence, which serves as an effective and useful guide to the understanding of patent claims.").

2. Extrinsic Evidence.

If the intrinsic evidence is ambiguous, a court may then refer to extrinsic evidence such as technical experts, dictionaries, prior art references and treatises for the meaning of technical terms or to understand the underlying technology. Such sources may not be used to contradict the claim language, but only to explain it, and when the intrinsic evidence is unambiguous, expert testimony is entitled to no weight. Even when the intrinsic evidence is ambiguous, expert testimony on claim construction should be treated with "utmost caution". *See Vitronics, supra*, 90 F. 3d at 1582-1585; *Markman*, 52 F. 3d at 979-986 (Fed. Cir. 1995).

B. The Disputed Claim Language

The parties dispute the following highlighted claim language in Patent '798:

> Claim 1. Building modules adapted to fit together for construction of **fire, sound and impact resistant** security barriers and rooms for use in securing records and persons, comprising in combination, an **outer shell of substantially parallelepiped shaped** with **two outer steel plate panel sections of greater surface area**

serving as inner and outer walls for a structure when a plurality of the modules are fitted together, sealant means spacing the two panel sections from steel to steel contact with each other by a thermal-acoustical barrier material, and further means disposed inside the shell for increasing its load bearing capacity comprising internal steel baffles extending inwardly from the steel shell walls.

. . .

Claim 21. **A prisoner detention facility providing vandalism resistance constructed of modular shells having outer steel plate wall panels** welded together to provide unitary inner and outer steel walls and **internal baffles** with the **modular shells enclosing insulating material providing substantial thermal, sound and impact resistance.**

Claim 22. Modular equipment for formulating detention structures comprising of a multiplicity of interchangeable modules fo [sic] similar size **having steel plate inner and outer wall sections defining end closures and internally directed load supporting baffles** with said modules welded together to form said detention structure.

. . .

Claim 24. **Modular equipment as defined in claim 22 including insulation material inside the modules for resisting fire, sound and impact.**

Claim 25. Modular equipment as defined in claim 22 including modular shape for

abutting modules end to end in registration to meet substantially only along two welded lines appearing at the inner and outer wall outer surfaces, wherein the multiplicity of modules are welded together along the two weld lines.

Claim 26. Modular equipment as defined in claim 22 including means defined in the end closures disposing thermal insulation between the inner and outer walls to interrupt steel to steel contact.

1. Claim 1

a. Preamble.

The parties agree that Claim 1 includes a preamble and three elements. The parties further agree that the preamble should be included in the claim because it contains four terms essential to the Patent. The preamble states:

> **Building modules adapted to fit together for construction of fire, sound and impact resistant security barriers and rooms for use in securing records and prisons, comprising in combination.**

(Exhibit 1, Column 6, Lines 22-25.)

The parties disagree, however, as to whether the foregoing terms "fire resistant", "impact resistant" and "sound resistant" are terms of art. The Plaintiff contends that as terms of art, these terms should be defined in accordance with the Model Building Code adopted by the organization of Building Officials and Code Administrators International, Inc., referred to as BOCA. (Plaintiffs Exhibit

4). According to BOCA definitions, "fire resistant" describes the ability to resist the spread of fire, particularly the ability to pass appropriate fire testing procedures. For most security applications, this requires passage of a two-hour loaded fire test. (BOCA definitions, sections 401.0 and 1403.1.1.) Sound resistance is defined as "ability to pass code test for the transmission of airborne and structural noise." (BOCA definitions 715.2 and 715.3.) Impact resistance is defined as "ability to resist any reasonably anticipated forces or kinetic loads in a jail or a prison environment." (Plaintiffs Exhibit 4.)

The Defendant argues that nothing in the Patent suggests that these be regarded as terms of art. Instead, the Defendant contends that they are unique terms that should be defined consistent with their use in the Specification.

With regard to terms "fire resistant" and "sound resistant", the opposing arguments create a distinction without a difference. Although the BOCA Code definitions are extrinsic evidence and the Specification is intrinsic evidence, the meanings and contextual reference of these terms in both sources is essentially the same.

The same cannot be said, however, for the term "impact resistant". With regard to impact resistance, the Defendant's argument is more persuasive. Although the general rule prohibits resort to the Specification in order to ascertain the meaning of a claim, an exception to the rule is applicable here. The term "impact resistant" is not defined in the claim. Therefore reference to some other source is required. The preferred reference is to intrinsic evidence such as the Specification, before resort to extrinsic evidence such as the BOCA definitions. *Vitronics*, 90

F.3d at 1582. In addition, the BOCA definition of the term "impact resistant" is imprecise because it is contextually dependent. BOCA's definition of impact resistant as the "ability to resist any reasonably anticipated forces or kinetic loads in a jail or prison environment" is meaningless without further explanation or identification of the anticipated kinetic or impact forces to be resisted.

It is the Specification which describes the anticipated forces or kinetic loads reasonably anticipated. It identifies these forces as coming from bullets or bomb fragments.

> In secured facilities, and protected barriers, it is feasible that projectiles may be encountered, such as bullets from high powered guns or bomb fragments. There have not been effective ways of dealing with these powerful impact weapons with inexpensive housing in the prior art.

(Exhibit 1, Column 3, Lines 27-32.)

. . .

> Thus the modular building construction afforded by this invention provides significant advantage wherever security provision need be provided. Typical wall characteristics include bullet and explosion resistance, fire and heat resistance, acoustic insulation, ease of manual assembly on site, and high structural strength.
>
> Uniquely the advantages of the steel shell modules are combined with thermal and acoustical isolation of two spaced walls in protection against bullet penetration of the walls. Accordingly, those novel features believed descriptive of

> the nature and spirit of the invention are defined with particularity in the claims.

(Exhibit 1, Column 6, Lines 14-20.)

Although the inventor and expert witnesses testified that the bullet penetration may not be the impact ordinarily associated with prisons, their testimony is disregarded in deference to the 14 clear statement in the Specification that the invention's impact resistance feature pertains to bullets and exploding projectiles. Thus, the Court agrees with the Defendant that term "impact resistant" is defined by the Specification as resisting the impact of bullets, exploding projectiles or bomb fragments.

b. Element 1

"An outer shell of **substantially** parallelepiped shaped . . . "

The parties have stipulated that a parallelepiped shape is a polyhedron, all of whose faces are a [sic] parallelograms. (McGraw Hill Dictionary of Scientific and Technical Terms.) In this context, a parallelepiped structure would be a six-sided box where each opposing pair of sides are parallel. The parties disagree as to the meaning of the word "substantially".

The Plaintiff contends that the term "substantially" has the meaning that those skilled in the art already know or could ascertain with the use of a dictionary. Thus, the Plaintiff contends that the word "substantially" means "considerable in . . . extent" or "largely, but not wholly that which is specified." *York Products Inc. v. Central Tractor Farm & Family Cntr, Inc.*, 99 F. 3d 1568 (Fed. Cir. 1995) (from American Heritage Dictionary, Second College

Edition, 2d Edition 1982 and Webster's Ninth New Collegiate Dictionary, Ninth Edition, 1983, respectively). The Plaintiff explains that "substantially parallelepiped" therefore means a shape that is almost, but not quite a parallelogram. The Defendants argue that the phrase "substantially parallelepiped" is ambiguous and therefore must be limited by Figures 6 and 7 of the Specification.

The difficulty in giving meaning to the phrase "substantially parallelepiped" is not in the meaning of the word "substantially". It is, instead, that the word "substantially" negates the characterization of "parallelepiped" to some degree. The issue is in what way and to what degree a "substantially parallelepiped" shape differs from a parallelogram. Simply stated, an object that is "substantially parallelepiped" is an object which is *not* a parallelogram because not all of its opposing sides are parallel with each other. This meaning is clear, but describing a structure as "substantially parallelepiped" does not reveal which sides of the parallelogram are and are not parallel. To that extent, the phrase is ambiguous.

Where claim language is ambiguous and therefore cannot be understood, it is appropriate to refer to the written description in the Specification. *Bell Atlantic Network Svs.*, 260 F. 3d at 1270-71. Reference to the Specification is helpful in this context because it clarifies which sides of the module are not parallel. Figures 2, 3, 6 and 7 reveal that it is the end panels of each module that are not parallel to each other.

All these figures show that one or both of the wall faces of the modules are bent to form the end abuttment [sic] structure, and that the bent portion flanges in toward the center of the wall. Indeed, the Specification describes this precise attribute.

> Modules of a size that may be manually processed are abutted together end to end in registration and welded together along two weld lines to form walls for the detention structure. The ends are indented so that the two weld lines at the wall section surfaces are the sole lines of registered contact. Exhibit 1, column 2, lns 5-10. As best seen from Fig. 3, the module ends are not perpendicular to the front and back panel facings 11 and 12. Thus the apex 49 of the right angle triangular panel section 21 is displaced inwardly toward the center of the module.... The end plate 40 thus is at an angle 48 of a few degrees. As a result there is only line contact between adjacent modules along the apex 25 and the apex 50 when the modules are assembled in registration.

(Exhibit 1, Col. 4, Lines 60-70.)

Thus, the Court concludes that for purposes of Claim 1, the phrase "substantially parallelepiped" means a six-sided parallelogram in which the end panels are neither parallel to each other nor perpendicular to the face walls.

c. Element 2

With two outer **steel plate panel sections of greater surface area serving as inner and outer walls** for a structure when a plurality of the modules are fitted together.

The parties have stipulated that the Specification provides a special meaning for "steel plate" in the Specification where the term is defined as meaning 14 to 10-gauge steel. The parties' dispute focuses on this language in the context of the following reference.

The Plaintiff contends that the phrase "steel plate panel sections of greater surface area" simply identifies the largest sides or wall faces of the six-sided wall module. The Defendants argue that the meaning of "steel plate panel sections of greater surface area" should be limited to the partially triangular shapes forming the interior and exterior walls in Figures 4, 5 and 6, and to comport with the language found in the Abstract and Specification.

> Three steel panel pieces are formed into a module, each being partly triangular in cross-section so that only one weld seam between two of the panels is required in assembling the three pieces, which thereby form the internal baffles that angles for deflecting bullets.

(Exhibit 1, Abstract, cover page.)

. . .

> . . . the modules comprise three steel plate wall panel sections of partially triangular cross section shape positioned to provide the internally directed baffles and the end closure walls.

(Exhibit 1, Column 2, Lines 2-5.)

This controversy focuses upon whether the subject language in Claim 1 is so broad and amorphous that it must be reconciled either with 1) the Specification or 2) Claims 4 through 16. The Plaintiff argues that Claims 4-16

describe and Figures 4, 5, 6 and 7 display the "best modes" of the invention contemplated by 35 U.S.C. § 112, rather than the only possible embodiment of the invention. The Plaintiff further argues that fundamental claim construction principles preclude any narrowing of the subject language, and that there is no need to resort to the Specification.

The Court agrees with the Plaintiff. Claim interpretation must not limit the claim to the "best mode" terms inasmuch as the patentee need not list every possible infringing device in the Specification. *Adams v. United States*, 330 F.2d at 625. The language describing "two outer steel plate panel sections of greater surface areas serving as inner and outer walls" is sufficiently precise to describe the face walls of a module. The language "for a structure when the plurality of the modules are fitted together" further explains that the steel plate panel sections serve as the inner and outer walls of the six-sided, module. Such terms are not so broad or amorphous that reference to the Specification is needed. Although all of the drawings in the Specification show triangular shapes in Figures 2, 4, 5, 6 and 7, the particularized shapes differ slightly and therefore represent varying modes of the invention. Although they are similar in several respects, only Figures 4, 5 and 6 display walls constructed of three triangular pieces. Figures 2 and 7 display walls constructed with slightly different shaped pieces. Indeed, Figure 7 is identified as a particular embodiment.

FIG. 2.

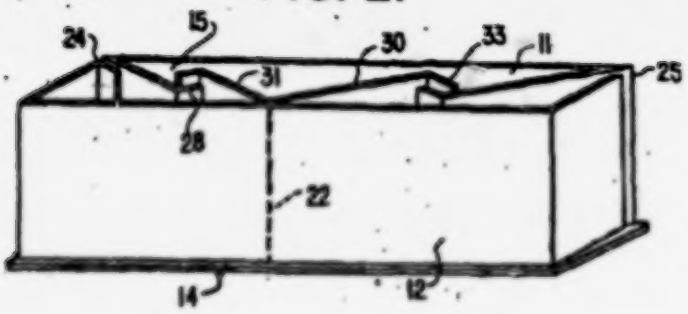
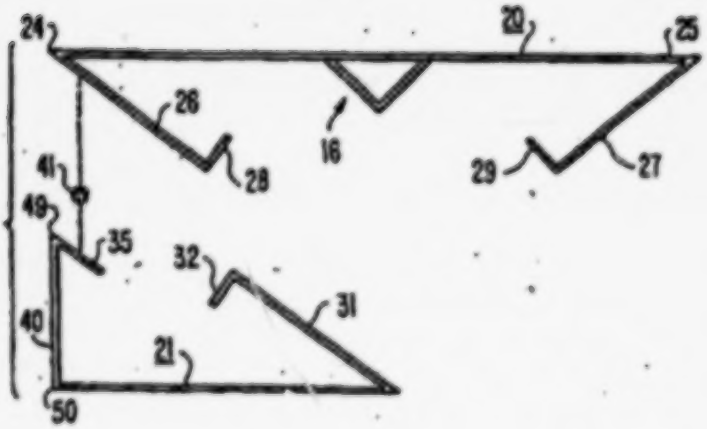


FIG. 4.



Compare to:

FIG. 5.

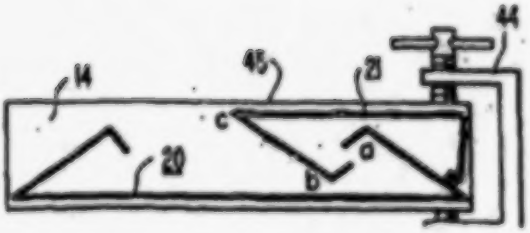
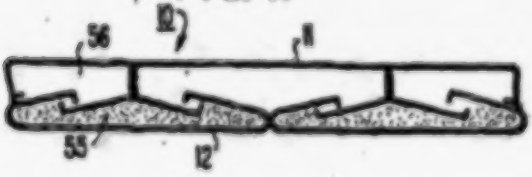


FIG. 7.



This language is also subject to application of the claims differentiation rule. Claims 4 through 16 are dependent claims in that they borrow the description found in Claim 1, but one of the primary distinctions between Claim 1 and Claims 4 and 16 is reference to the triangular shape depicted in Figures 4, 5 and 6, above. Thus, this language is not limited to the triangular shapes displayed in Figures 4, 5 and 6 of the Specification.

d. Element 3

Sealant means spacing the two panel sections from steel to steel contact with each other by a thermal acoustical barrier material.

The Defendant contends that the means-plus-function test of 35 U.S.C. § 112, is applicable and therefore the definition of sealant should be determined by the Specification as compressible glass rope. Plaintiff replies that although this element appears to be in a means-plus-function format, it is not limited by the Specification because the structure to perform the function is specified in the claim. According to the Plaintiff, the specified structure is a thermal acoustical barrier which can be of varying types of material.

It is not necessary to decide whether the means-plus-function characterization is applicable or not because both the plain language and the Specification anticipate that a sealant is a spacer with thermal acoustical properties. Neither limits the sealant to compressible glass rope. Thus, the sealant described in this claim may be a glass fiber rope or some other material with thermal acoustical properties.

e. Element 4

Further means disposed inside the shelve for increasing its load bearing capacity comprising internal steel baffles extending inwardly from the steel shell [sic] **walls.**

The Defendants argue that this element is written in a means-plus-function format and, therefore, should be defined and limited by the Specification, particularly limited to the description and display of baffles disposed at acute or oblique angles to the wall faces.[2] Alternatively, Defendants argue that "baffle" is not adequately defined in Claim 1 and therefore should be defined by the figures and text of the Specification as 1) being deployed toward the interior of the module at an angle other than 90° for the purpose of deflecting bullets or other projectiles; and 2) that the baffles form an intermediate, interlocking barrier.

The Plaintiff responds that although this phrase appears to be a means-plus-function element, it is not because the language identifies the structure, "internal steel baffles" and locates them, "extending inwardly from the steel shell walls". Plaintiff further argues that the term "load bearing" is a technical term. Plaintiff concedes that the word "baffle" is not specifically defined in the patent. The parties have stipulated that the meaning of "baffle" is a "means for obstructing, impeding or checking the flow of something". Webster's Third International Dictionary; (Parties' Joint Claim Construction Statement

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[2] (Exhibit 1, Abstract Cover Page; Exhibit 1, Column 1, Lines 48-62; Exhibit 1, Column 2, Lines 12-16; Exhibit 1, Column 3, Lines 26-32; Exhibit 1, Column 3, Lines 43-44; Exhibit 1, Column 5, Lines 14-18; Exhibit 1, Column 5, Lines 20-24; Exhibit 1, Column 5, Lines 20-24; Exhibit 1, Column 5, Lines 25-29); Figures 2, 4, 5, 6 and 7.

I.). Thus, Plaintiff argues that the drawings in the Specification which show angled baffles disposed to deflect bullets and other projectiles are simply best mode drawings and that the claim does not require either a required angle of deflection nor that baffles create an intermediate, interlocking barrier. To support this argument, the Plaintiff points out that baffles which act as an intermediate barrier designed to deflect bullets and other projectiles appear in Claim 6-14, but not in the other patent claims. Plaintiff also argues that the doctrine of claim differentiation requires acknowledgment that Claim 1 generally describes baffles while Claims 2, 6, 10, 17, 19 and 23 specifically describe angled baffles. Furthermore, Plaintiff argues that the baffles described in this claim need not create an intermediate barrier as displayed in Figures 2, 6 and 7.

The Court's analysis begins with the parties' stipulation that "baffle" is defined as a "means for obstructing, impeding or checking the flow of something". (Webster's Third International Dictionary.) Using this definition, the reference to "baffle" in Claim 1 is ambiguous to the extent that it does not identify the substance or force the flow of which it is intended to check, impede or obstruct. The modifying language, "load bearing capacity comprising internal steel" and "extending inwardly from the steel shell walls," does not offer further clarity. Although the preamble of the claim suggests that the purpose of the "baffle" is to enhance heat, sound and impact resistance, even this language does not identify the substance which the baffle checks, impedes or obstructs. The subject language includes a means and a structure, but does not adequately describe the function of the structure. Therefore, I conclude that this language is a means-plus-function

description that is limited by the Specification pursuant to 35 U.S.C. § 112.

In referring to the Specification, the Court is cognizant that a Specification ordinarily sets out the "best mode" of the invention, and that ordinarily the claim need not be limited to that mode. However, where the Specification does not describe the embodiments in terms of "best mode", the embodiment may be the invention, itself, rather than only one way of utilizing it. *See Autogiro*, 384 F.2d at 398.

In the context of this invention, the parties agree that a "baffle" is an object which checks, impedes or obstructs the flow of something. The questions are what is checked, impeded or obstructed, and from what direction does that something come? The "means-plus-function" characterization requires reference to the Specification. The Specification does not expressly answer either question, but it implies answers. The Specification refers to sound and heat resistance generally, and specifically refers to baffles to retard fire and projectiles. (Exhibit 1, Column 1, Lines 39-42; Exhibit 1, Column 3, Lines 11-16; Lines 26-31; Lines 41-45; Exhibit 1, Column 5, Lines 14-24).

Both fire and projectiles impact a wall face rather than the ends of a module. Thus, one can reasonably anticipate that the internal baffles are intended to block fire or projectiles which impact the wall faces. To achieve this purpose, every textual reference in the Specification and its diagrams show baffle deployment at an angle other than 90° to the wall faces. This makes sense. If a baffle were perpendicular to the face wall, it would deflect or restrict substances or forces flowing from one end of the module to the other rather than those which impact a wall

face. Because bullets, projectiles and fire would impact the face walls of the module, the baffles are placed at an oblique or acute angle to the face wall. Furthermore, the placement of the baffles at such angles creates an intermediate interlocking, but not solid, internal barrier in each module. This is displayed in all figures showing baffles. (See Figures 2, 4, 5, 6 and 7).

This interpretation is also consistent with the prosecution history of patent '798. When originally submitted, Claim 1 contained no reference to "baffles". Instead, it referred to "further means disposed inside the shell for increasing its load bearing capacity". Claim 1 was rejected pursuant to 35 U.S.C. § 103 as unpatentable because it duplicated patent #389 9043 issued to Mr. Hall. The Hall patent described wall modules designed to resist sound and fire and were joined with a sealant. When Claim 1 was amended to include the "internal steel baffle" language, the invention became distinguishable from the prior art of the Hall patent.

Plaintiff acknowledges that prior art such as the Hall patent utilized sandwich walls and face walls linked by steel studs. The unique aspect of the Phillips patent is the use of a "baffle" which acts as a steel stud but it does not extend from one wall face to the other and is angled so as to obstruct or restrict something. The things that are uniquely restricted or obstructed in Patent '798 are heat, bullets and bomb fragments. Thus, I conclude that for purposes of this Claim, "baffle" has two attributes. A "baffle" extends inward from the steel shell walls at an oblique or acute angle to the wall face and it forms, with other baffles, an intermediate, interlocking but not solid barrier in the interior of the wall module.

2. Claim 21

Claim 21 includes a preamble and three elements. The preamble states:

> **A prisoner detention facility providing vandalism resistance constructed of . . .**

The parties agree that the preamble is part of the claim because it defines a unique feature of this prison detention facility to be its ability to withstand attempts to destroy and deface it.

a. Element 1

Modular shell having outer steel plate wall panels.

As in Claim 1, the parties agree that "steel plate" is defined by the Specification to mean 14- to 10-gauge steel, and that "wall panels" are the larger surface area sides of the six-sided parallelepiped shape which comprises the module.

The Defendant argues that the complete phrase "modular shell having outer steel plate wall panels" should be limited by the Specification text describing Figures 2, 4 and 6. (See p. 18, *infra*.) Each figure reflects three triangulated shapes which when fitted together create the external wall surfaces of the module and an interlocking internal baffle structure. The Specification describes this configuration as,

> Three steel panel pieces are formed into a module, each being partly triangular in cross-section so that only one weld seam between the two panels is required in assembling the three pieces,

FIG. 2.

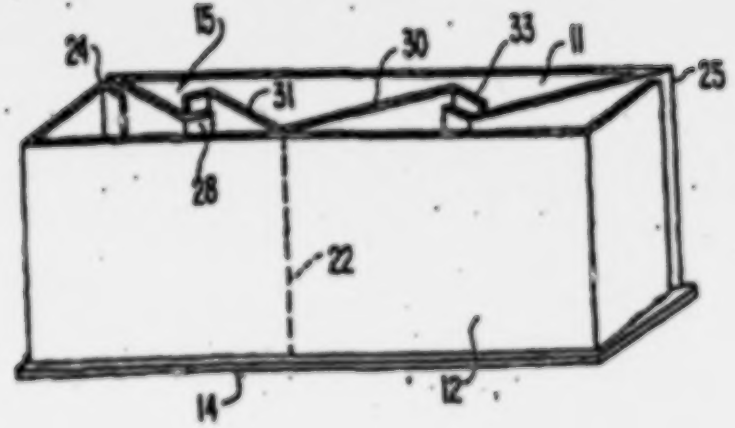


FIG. 3.

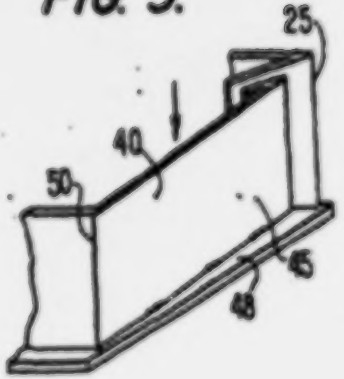


FIG. 6.

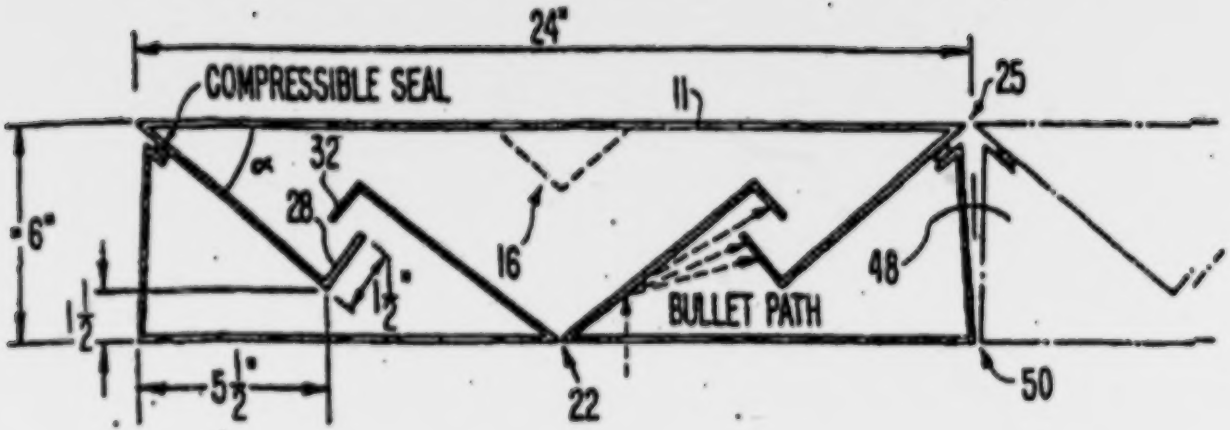
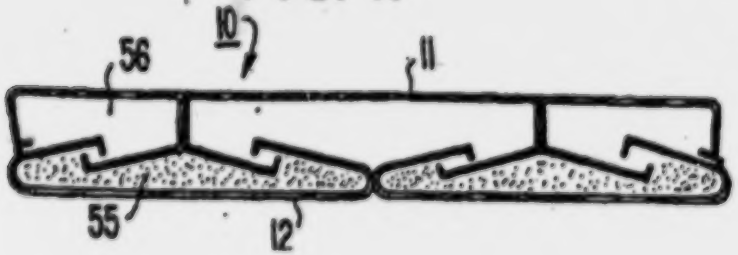

24"
COMPRESSIBLE SEAL
11
25
α
32
28
16
48
6"
1½"
1½"
BULLET PATH
5½"
22
50

FIG. 7.


10
56
11
55
12

> which thereby form the internal baffles at angles for deflecting bullets.

(Exhibit 1, Abstract Cover Page.)

> The modules comprise three steel plate wall panel sections of partially triangular cross section shape positioned to provide the internally directed baffles and enclosure walls.

(Exhibit 1, Column 2, Lines 2-5.)

> It may be seen that each model has its sides and end walls formed from two kinds of standard panel sections.

(Exhibit 1, Column 4, Lines 22-24.)

Plaintiff replies that the Specification figures and language reflect only the "best mode" or a single embodiment of the patent as described in Claims 4 through 20. Plaintiff further argues that Claims 4-20 are independent from Claim 21 and their limitations should not be read into Claim 21. Plaintiff also argues that the Abstract should not be used to interpret the claim.

The Court agrees with the Plaintiff. The '798 patent has unique features suited to its use in a prison facility, but the embodiment showing three triangulated pieces welded together to form a module is not the sole embodiment anticipated by the patent. As noted with regard to Claim 1, Element 2, there is a difference in between the configuration of the face walls in Figures 2, 4 and 6 (See p. 20) and Figures 5 and 7 (See p. 21). In figures 5 and 7, the face walls are bent but they do not have a fully triangular shape. Thus, in this aspect, the triangular shape found in Figures 2, 4 and 6, and as described in Claims 4-20, is simply one embodiment of the patent. The language

of this element is clear on its face and need not be limited by the language or figures contained in the Specification.

b. Element 2

Welded together to provide unitary inner and outer steel walls and internal baffles . . .

The Plaintiff argues that these terms are not given special meaning in the Specification and therefore are to be given their ordinary meanings. However, the parties agree that "baffle" is defined as "something for deflecting, checking or otherwise regulating flow." Webster's Third International Dictionary.

Consistent with the argument made with regard to Claim 1, the Defendants argue that the term "internal baffles" should be limited by the Specification in two respects. "Baffle" should be interpreted to require that 1) a baffle be disposed at an angle other than 90° to the wall face in order to deflect bullets and projectiles; and 2) baffles interlock to form an intermediate barrier bifurcating the module's interior.

There is no suggestion in Claim 21 that the definition of "baffle" should be different than the definition of baffle in Claim 1. With regard to Claim 1, the Court has previously determined that a "baffle" should be interpreted to require disposition at an acute or oblique angle (other than 90°) to the wall face in order to deflect bullets and projectiles. The Court has concluded that the only embodiment of the patent described in the Specification utilized baffles, interlocking to form an intermediate but not solid barrier. This is because a baffle is something for deflecting, checking or otherwise regulating flow.

c. Element 3

With the modular shelves enclosing insulating material providing substantial thermal, sound and impact resistance.

The Defendant argues that this element is vague in that no definition is provided to interpret what the inventor means by the term "substantial" in modifying thermal, sound and impact resistance provided. Particularly, the Defendant argues that the language fails to specify a quantitative or qualitative measure of resistance to heat, sound, or impact. The Defendants further argue that in order to have substantial impact resistance, the invention must use "hard insulating materials such as concrete gravel, etc." but to provide "substantial heat or sound resistance" the invention must include "soft" insulating material such as foam board. The Defendant relies upon the testimony of Plaintiff's expert witness, Norman Werkler, who acknowledges that both types of insulation are required to simultaneously enhance impact, heat and sound resistance. (Exhibit 3, p. 135, Lines 12-20). To provide both type of insulation materials requires the separation of the materials into two compartments which are created by the baffles' intermediate, interlocking barrier.

This claim language is not so vague that it has no meaning, particularly in light of the prior conclusion that the term "baffle" must be interpreted in a manner consistent with the Specification. Because a "baffle" is deployed from an outer wall toward the center of the module at an angle other than 90° to the wall face and because the only embodiment presented in the Specification displays the baffles creating an interlocking, intermediate barrier no further limitation is required to give meaning to this

language. It is possible that either one type of insulating material or that two types of insulating material are appropriate each serving different functions.

3. Claim 22

Modular equipment for formulating detention structures.

Both parties agree that the preamble language defines the invention and is a limitation on this claim.

a. Element 1

A multiplicity of interchangeable modules of similar size.

Neither party argues for a special meaning for these terms.

b. Element 2

having steel plate inner and outer wall sections defining end closures and internally directed load supporting baffles . . .

"Steel plate" is the same term defined previously in conjunction with Claim 1 and Claim 21 to mean 14- to 10-gauge steel. The Defendants argue that "inner and outer wall sections defining enclosures" has a meaning different from the language of Claim 1 "two outer steel plate wall sections of greater surface area serving inner and outer walls." As they have previously argued in the context of Claim 21, the Defendants respond that the language in Claim 22 specifically refers to the three-panel design described in text and depicted in Figures 4 and 6 of the

Specification. This design is a configuration of wall panel sections with two different triangular shapes which, when fitted together, create all the required elements of the module, including the baffles and the internal locking intermediate barrier to projectiles and bullets. The Defendants rely upon language in the Specification as follows:

> The modules comprise three steel plate wall sections of partially triangular cross section shapes positioned to provide the internally directed baffles and enclosure walls.

(Exhibit 1, Column 2, Lines 2-5.)

> The longer panel sections 20 comprise a cross section substantially that of the base of two partial legs of a triangle forming acute angles having an apex points at the opposite ends 24, 25 of the completed module. This construction affords integrally attached inwardly pointing baffles 26, 27.

(Exhibit 1, Column 4, Lines 30-35.)

> The two shorter panel sections 21 abutted together, with each extending substantially half the dimension of the triangular base wall 11 of the longer panel similarly formed internally directed baffles 30, 31 . . . these panel sections 21 then form in cross section a part of the substantially right triangle having the right angle forming the end walls 40 of the module.

(Exhibit 1, Column 4, Lines 38-47.)

The Plaintiff responds that Claims 4 through 20 contain a description of the outer walls being bent to form end panels and baffles in a triangular shape, but that such claims are independent from Claim 22 and therefore,

under the doctrine of claim differentiation, such limitation should not be read into Claim 22. The Plaintiff further argues that the end structure of the module in Claim 22 is not described as those in Claim 4 and 20.

The problem here is that the end closure is not defined in Claim 22, at all. Indeed, the language "inner and outer wall sections defining end closure" is ambiguous. How walls "define end closures" is not clear from the claim and thus requires reference to the Specification. The Specification clarifies the meaning – the inner and outer walls of the module "define" the enclosure by being bent to create the end abuttment. No text or figure in the Specification shows any embodiment of the patent with an independent end piece that joins the two face walls. Indeed, it is the bending of the outer and inner wall to create the end piece which ensures that the end piece is not at right angles to the inner and outer walls, thereby limiting the metal-to-metal contact at the ends of adjoining modules.

The Defendant also contends that the language "internally directed load supporting baffles" should be interpreted and limited by the Specification. The Plaintiff responds as it has with regard to Claim 1 and to Claim 22, that the baffles need not interlock, need not form an intermediate barrier and need not be disposed as angles to the wall face other than 90°.

As determined with regard to the word baffle in Claim 1 and Claim 22, the term "baffle" in Claim 22 must be limited by the Specification. There is no indication in Claim 22 that "baffle" should have a different meaning than in the prior two claims. The modifying language "internally directed load supporting" does not change

either the function or the configuration of the baffles as reflected in the Specification.

Thus, the language of this element describes outer wall sections which are bent to create end closures but are not necessarily triangularly shaped and baffle is defined as in Claim 1.

4. Claim 24

Modular equipment is defined in Claim 22 including insulation material inside the modules for resisting fire, sound and impact.

The Plaintiff contends, as it has with regard to Claim 1, that Claim 22 should be read in the context of a jail or prison environment and that no words in this claim have special definitions. The Defendant contends that the claim should be interpreted to require that the modular shell enclose material, separated by an intermediate interlocking barrier, which provides a significant amount of increased protection against thermal sound and impact transmission, including projectile penetration from one outer face of the module to the other outer face wall of the module.

The analysis with regard to Claim 22 resolves this dispute. Because the definition of "baffle" in Claim 22 includes the intermediate interlocking barrier described and displayed in the Specification, there is no need to provide greater specificity with regard to the insulating material to be used.

5. Claim 25

Modular equipment as defined in Claim 22 including modular shape for abutting modules end-to-end in registration to meet substantially only along two welded lines appearing at the inner and outer wall surfaces wherein the multiplicity of modules are welded together along the two weld lines.

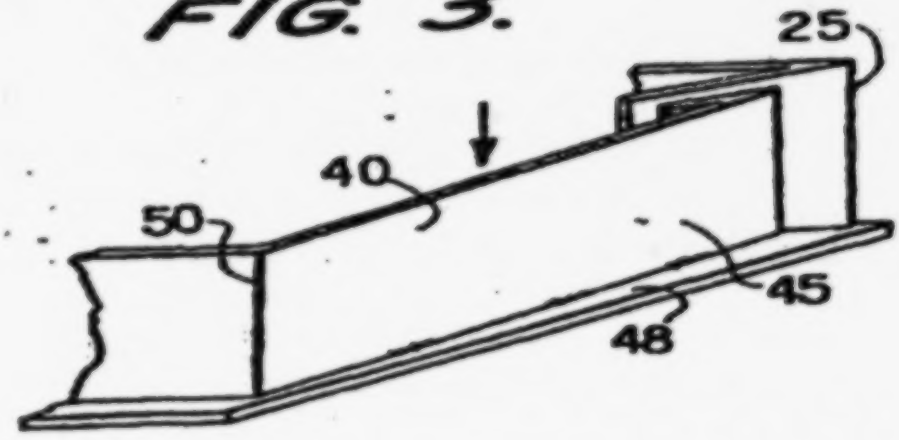
The Plaintiff contends that all terms of this claim should be given their ordinary meaning. Unlike Claims 21, 22, 24 and 26, this claim requires that the modules only be welded at specific places – seams on the "inner and outer wall surfaces."

Initially, the Defendants contended that this claim was fatally vague because it is not comprehensible to one with ordinary skill in the art. The Defendants later changed their position to argue that Claim 25 be construed to require that the ends of the two modules touch each other only at the seam lines. The Defendant argues that this is accomplished by shaping the end panels so that they do not lie flat against each other but are somewhat concave. Because no such limitation is presented in the claim, Defendants apparently rely on the embodiment of the invention described in the Specification at Column 4, Ln 60 to Column 5, Ln 4. This section reads:

> As best seen from FIG. 3, the module ends 40 are not perpendicular to the front and back panel facings 11 and 12. Thus the apex 49 of the right angle triangular panel section 21 is displaced inwardly toward the center of the module from the apex 25 of the longer panel section 20. The end place 40 thus is at an angle 48 of a few

degrees. As a result there is only line contact between adjacent modules along the apex 25 and along the apex 50 when the modules are assembled in registration by welding the two modules together. Thus only the seam 22 and the corresponding seams along the apex lines 25 and 50 need be finished by sanding, etc. to provide smooth inner and outer wall surfaces.

FIG. 3.



The Court agrees with the Defendants, in part. The language of Claim 25 requires that the modules meet only at the weld lines on the inner and outer walls. If the end components were configured at right angles to the outer walls, modules would meet not only at the weld lines but also for the entire length of the end panels. This is contrary to a fundamental aspect of the invention; that of preventing steel-to-steel contact between the inner and outer walls of the modules. In addition, such interpretation would be contrary to the language of Claim 22 upon which this claim depends. As with regard to Claim 22, reference to the Specification is required to determine the

configuration of the end closures. The only end closures depicted and described in the Specification are end closures created by the bending of the inner or outer face wall at an angle other than 90°. Such configuration is displayed in Figures 2, 3, 4, 5, 6 and 7. No figures or text identifies this configuration as a "best mode" embodiment; indeed, it is the only mode that is described and furthermore is the only mode that meets the objective of the invention – that of preventing a steel-to-steel connection between the inner and outer walls.

The Court does not agree, however, with the Defendants' argument that the construction must reflect a concave wall. There is nothing in this claim or in the Specification that suggests a concave configuration, merely that the inner and outer walls be bent to create end closures at an acute or oblique angle to the wall face.

6. Claim 26

> Modular equipment as defined in Claim 22, including means defined in the end closures **disposing thermal insulation between the inner and outer walls to interrupt steel-to-steel contact.**

The Defendants argue that Claim 26 is stated in a means-plus-function format requiring resort to the Specification is required to determine the means for the function. The means disclosed in the Specifications is the "compressible seal" as depicted in Figure 6, and as elaborated upon in reference to Element 2, Claim 1 as glass fiber rope. The function provided is the interruption of steel-to-steel contact between the inner and outer walls.

The Plaintiff contends that this claim contains no special terms and relates to the same issues discussed for Claim 1. The Plaintiff readily acknowledges that "one of the main ideas in this invention is the thermal isolation of the two wall faces to prevent the spread of fire, as well as sound and impact". Thus, the Plaintiff contends that this claim allows for any type of thermal insulation to be interposed between the wall faces to prevent steel-to-steel contact which would defeat the fire, sound and impact resistance of the module.

The dispute with regard to this claim is resolved by the same analysis expressed with regard to Claim 1. As acknowledged by the Plaintiff, one of the main ideas of the invention is to prevent a steel-to-steel connection between the inner and outer wall. Both the language of this claim and the Specification anticipate that there may be different substances which may act as a seal between the bent end piece of one wall face and the other wall.

2. Summary of Claim Construction

Based upon the foregoing, I construe the disputed claims language as follows:

Claim 1

"Impact resistant" is construed as pertaining to projectiles such as bullets and bomb fragments. "Substantially parallelepiped shaped" means a six-sided parallelogram in which the end panels are neither parallel to each other nor perpendicular to the face walls. The phrase "steel plate panel sections of greater surface area serving as inner or outer walls for a structure when a plurality of

the modules are fitted together" is not limited to the embodiment described in Claims 4 through 16 nor as reflected in Figures 4, 5 and 6 where the modules are constructed with the assembly of three triangularly shaped pieces. "Sealant" is not limited to glass fiber rope.

"Internal steel baffle" means a structure obstructing, impeding or checking the flow of heat and projectiles such as bullets or bomb fragments deployed toward the interior of the module at an angle of other than 90° and when fully assembled forms an intermediate, interlocking, but not solid, barrier.

Claim 21

The term "modular steel shells having outer steel plate wall panels is not limited to the triangular shape reflected in Figures 4, 5 and 6 or described in Claims 4 through 20. Insulating material providing substantial thermal, sound or impact resistance does not require an intermediate interlocking barrier.

Claim 22

The phrase "inner and outer wall sections defining end closure and internally directed load supporting baffles" does not mean that the wall need be configured by use of three triangular shapes as in Figures 4, 5 and 6, however, baffle is defined as in Claim 1.

Claim 24

No interpretation is required in light of the construction interpretation for Claim 22.

Claim 25

This language is interpreted to mean that the end closures are configured by bending the face walls at an angle other than 90° but not necessarily creating a concave surface.

Claim 26

The term "means defined in the end closure disposing thermal insulation between the inner and outer walls" is not limited to glass fiber rope.

DATED this 20th day of November, 2002.

BY THE COURT:

/s/ Marcia S. Krieger
Marcia S. Krieger
United States District Court

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

Case No. 97-MK-212 (CBS)

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing **Memorandum Opinion and Order on Claim Construction for '798 Patent** was served on November 22, 2002, by:

(X) delivery to:

Magistrate Judge Craig B. Shaffer

( ) e-mail to:

( ) facsimile to:

(X) depositing the same in the United States mail, postage prepaid, addressed to:

Carl F. Manthei
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Boulder, CO 80302

Alexander Garlin
Garlin, Driscoll & Murray
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Louisville, CO 80027-9439

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Boulder, CO 80302

JAMES R. MANSPEAKER, Clerk

By /s/ [Illegible]
Deputy Clerk

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Honorable Marcia S. Krieger

Case No. 97-MK-212 (CBS)

EDWARD H. PHILLIPS,

Plaintiff(s),

v.

AWH CORPORATION, et al.,

Defendants.

ORDER GRANTING MOTION FOR RECONSIDERATION

(Filed Jan. 22, 2003)

THIS MATTER comes before the Court pursuant to the Defendants' Motion for Reconsideration **(# 153)** of the Court's May 8, 2002 Order **(# 143)** denying the Defendants' Motion for Summary Judgment of Non-Infringement, and the Plaintiff's response **(# 156)**. The parties have also filed a Joint Motion to Vacate the Final Trial-Preparation Conference and jury trial **(# 157)**.

On May 8, 2002, this Court denied the Defendants' Motion for Summary Judgment on the issue of Non-Infringement. Subsequently, the Court construed the patent and issued an Order reflecting the proper construction of the claims. In light of the Order construing the claims, the Plaintiff moved for reconsideration of the denial of summary judgment, contending that the claims as construed demonstrated the Defendants' entitlement to a finding of non-infringement as a matter of law. In

response to the motion for reconsideration, the Plaintiff concedes that, under the patent as construed by the Court, he cannot prove infringement by the Defendants.

Accordingly, the Defendants' Motion for Reconsideration **(# 153)** is **GRANTED**. Upon reconsideration the Court's Order of May 8, 2002 is **VACATED**, and the Defendants' Motion for Summary Judgment of Non-Infringement **(# 115)** is **GRANTED**. The parties' Joint Motion to Vacate **(# 157)** the remaining proceedings is **GRANTED**.

Dated this 21st day of January, 2003.

BY THE COURT:

/s/ Marcia S. Krieger
Marcia S. Krieger,
United States District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

Case No. 97-MK-212 (CBS)

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing **Order Granting Motion for Reconsideration** was served on January 22, 2003, by:

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United States Court of Appeals
for the Federal Circuit

03-1269,-1286

EDWARD H. PHILLIPS,

Plaintiff-Appellant,

v.

AWH CORPORATION,
HOPEMAN BROTHERS, INC.,
and LOFTON CORPORATION,

Defendants-Cross Appellants.

Carl F. Manthei, Attorney at Law, of Boulder, Colorado, filed a petition for rehearing en banc for plaintiff-appellant.

Mark W. Fischer, Faegre & Benson LLP, of Boulder, Colorado, filed a response to the petition for defendants-cross appellants. With him on the response was Scott Holwick.

Appealed from: United States District Court for the District of Colorado

Judge Marcia S. Krieger

Before MAYER, *Chief Judge*, NEWMAN, MICHEL, LOURIE, CLEVENGER, RADER, SCHALL, BRYSON, GAJARSA, LINN, DYK, and PROST, *Circuit Judges*.

ORDER

(Filed Jul. 21, 2004)

A combined petition for panel rehearing and rehearing *en banc* having been filed by the Plaintiff-Appellant, and a

response thereto having been invited by the court and filed by the Defendants-Cross Appellants, and the petition for rehearing having been referred to the panel that heard the appeal, and thereafter the petition for rehearing *en banc* having been referred to the circuit judges who are in regular active service, and a poll having been taken

IT IS ORDERED THAT:

(1) the petition for rehearing is denied;

(2) the petition to rehear the appeal *en banc* is granted;

(3) the judgment of the court entered on April 8, 2004, is vacated, and the opinion of the court accompanying the judgment, reported at 363 F.3d 1207 (Fed. Cir. 2004), is withdrawn.

This court has determined to hear this case *en banc* in order to resolve issues concerning the construction of patent claims raised by the now-vacated panel majority and dissenting opinions. The parties are invited to submit additional briefs directed to these issues, with respect particularly to the following questions:

1. Is the public notice function of patent claims better served by referencing primarily to technical and general purpose dictionaries and similar sources to interpret a claim term or by looking primarily to the patentee's use of the term in the specification? If both sources are to be consulted, in what order?

2. If dictionaries should serve as the primary source for claim interpretation, should the specification limit the full scope of claim language (as defined by the dictionaries) only when the patentee has acted as his own lexicographer or when the specification

reflects a clear disclaimer of claim scope? If so, what language in the specification will satisfy those conditions? What use should be made of general as opposed to technical dictionaries? How does the concept of ordinary meaning apply if there are multiple dictionary definitions of the same term? If the dictionary provides multiple potentially applicable definitions for a term, is it appropriate to look to the specification to determine what definition or definitions should apply?

3. If the primary source for claim construction should be the specification, what use should be made of dictionaries? Should the range of the ordinary meaning of claim language be limited to the scope of the invention disclosed in the specification, for example, when only a single embodiment is disclosed and no other indications of breadth are disclosed?

4. Instead of viewing the claim construction methodologies in the majority and dissent of the now-vacated panel decision as alternative, conflicting approaches, should the two approaches be treated as complementary methodologies such that there is a dual restriction on claim scope, and a patentee must satisfy both limiting methodologies in order to establish the claim coverage it seeks?

5. When, if ever, should claim language be narrowly construed for the sole purpose of avoiding invalidity under, *e.g.*, 35 U.S.C. §§ 102, 103 and 112?

6. What role should prosecution history and expert testimony by one of ordinary skill in the art play in determining the meaning of the disputed claim terms?

7. Consistent with the Supreme Court's decision in *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996), and our *en banc* decision in *Cybor Corp. v. FAS Technologies, Inc.*, 138 F.3d 1448 (Fed. Cir. 1998), is it appropriate for this court to accord any deference to any aspect of trial court claim construction rulings? If so, on what aspects, in what circumstances, and to what extent?

This case will be heard *en banc* on the basis of the briefs already filed and any additional briefs addressing the questions set forth above. An original and thirty copies of all additional briefs shall be filed, and two copies served on opposing counsel. Such additional briefs shall be filed simultaneously by the parties, sixty days from the date of this Order, and shall not exceed 7,000 words in length.

Amicus curiae briefs may be filed by bar associations, trade or industry associations, government entities, and other interested parties. In particular, the United States Patent and Trademark Office is invited to submit an *amicus curiae* brief. *Amicus* briefs shall be limited to 5,000 words, and shall be filed within sixty days from the date of this Order. *Amicus* briefs shall comply with Fed. R. App. P. 29 and Federal Circuit Rule 29. In order to reduce the number of redundant briefs, the court requests that, whenever possible, *amicus* participants advocating similar positions file a joint brief.

Both the parties' briefs and the *amicus* briefs shall be limited to the issue of claim construction, and shall not address the issue of whether the plaintiff-appellant's trade secret misappropriation claim was barred by the statute of limitations.

Oral argument will be scheduled by a later order.

RADER, *Circuit Judge*, concurs in a separate opinion.

MAYER, *Chief Judge*, dissents in a separate opinion.

FOR THE COURT,

JUL 21 2004
Date

/s/ Jan Horbaly
Jan Horbaly
Clerk

RADER, *Circuit Judge*, concurring in this court's order to rehear the appeal *en banc*.

To provide completeness in the *en banc* proceeding, this court should receive commentary on the following question as well:

> Is claim construction amenable to resolution by resort to strictly algorithmic rules, e.g., specification first, dictionaries first, etc.? Or is claim construction better achieved by using the order or tools relevant in each case to discern the meaning of terms according to the understanding of one of ordinary skill in the art at the time of the invention, thus entrusting trial courts to interpret claims as a contract or statute?

MAYER, *Chief Judge*, dissenting.

Until the court is willing to reconsider its holdings in *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (en banc), *aff'd on other grounds*, 517 U.S. 370 (1996), and *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448 (Fed. Cir. 1998) (en banc), that claim construction is a pure question of law subject to *de novo* review in this court, any attempt to refine the process is futile. Nearly a decade of

confusion has resulted from the fiction that claim construction is a matter of law, when it is obvious that it depends on underlying factual determinations which, like all factual questions if disputed, are the province of the trial court, reviewable on appeal for clear error. To pretend otherwise inspires cynicism. Therefore, and because I am convinced that shuffling our current precedent merely continues a charade, I dissent from the *en banc* order.

(2)

No. 05-602

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In The
Supreme Court of the United States

AWH CORPORATION, et al.,

Petitioners,

v.

EDWARD H. PHILLIPS

On Petition For A Writ Of Certiorari To The United States Court Of Appeals For The Federal Circuit

BRIEF FOR EDWARD H. PHILLIPS IN OPPOSITION

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QUESTION PRESENTED

Whether the Federal Circuit is correct in holding that all aspects of a district court's patent claim construction may be reviewed *de novo* on appeal.

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BRIEF FOR EDWARD H. PHILLIPS IN OPPOSITION

OPINIONS BELOW

The opinion of the Court of Appeals *en banc* is reported at 415 F.3d 1303. *See* App. at 1-63. The majority and dissenting opinions of the panel of the Court of Appeals were reported at 363 F.3d 1207 (withdrawn). *See* App. at 64-84. The order of the Court of Appeals granting rehearing *en banc* was entered on July 21, 2004 and is published at 376 F.3d 1382, *See* App. at 137-42. The opinion of the District Court granting summary judgment in favor of Petitioners was entered on January 22, 2003, and is unpublished. *See* App. at 134-37. The order of the District Court on claim construction was entered on November 22, 2002, and is also unpublished. *See* App. at 89-133.

JURISDICTION

The jurisdiction of the District Court was invoked under 28 U.S.C. §1331 and §1338(a). The jurisdiction of the Court of Appeals was invoked under 28 U.S.C. §1295(a)(1). On April 8, 2004, a panel of the Court of Appeals issued its judgment. On July 21, 2004, the Court of Appeals ordered an *en banc* rehearing of the appeal. *See* App. at 137-42. The Court of Appeals issued its *en banc* judgment on July 12, 2005. On September 29, 2005, Justice Breyer extended the time within which to petition for a writ of certiorari to and including November 9, 2005. The time to file an opposition to the petition has been

extended to January 4, 2006. This Court has jurisdiction under 28 U.S.C. §1254(1).

RULE INVOLVED

Petitioners contend that Federal Rule of Civil Procedure 52(a) is involved on the ground that matters of fact were reviewed *de novo* by the Court of Appeals for the Federal Circuit. Respondents believe the issue of claim construction is a conclusion of law as a matter of law and there is no violation of Rule 52(a) which reads as follows:

Findings by the Court; Judgment on Partial Findings:

(a) Effect.

> In all actions tried upon the facts without a jury or with an advisory jury, the court shall find the facts specially and state separately its conclusions of law thereon, and judgment shall be entered pursuant to Rule 58; and in granting or refusing interlocutory injunctions the court shall similarly set forth the findings of fact and conclusions of law which constitute the grounds of its action. Requests for findings are not necessary for purposes of review. Findings of fact, whether based on oral or documentary evidence, shall not be set aside unless clearly erroneous, and due regard shall be given to the opportunity of the trial court to judge of the credibility of the witnesses. The findings of a master, to the extent that the court adopts them, shall be considered as the findings of the court. It will be sufficient if the findings of fact and conclusions of law are stated orally and recorded in open court following the close of the evidence or appear in an opinion

> or memorandum of decision filed by the court. Findings of fact and conclusions of law are unnecessary on decisions of motions under Rule 12 or 56 or any other motion except as provided in subdivision (c) of this rule.

STATEMENT OF THE CASE

This action was filed on February 3, 1997, alleging the infringement of U.S. Patent 4,677,798 (the '798 patent) and misappropriation of trade secrets by Defendants. On September 12, 1997, Judge Edward W. Nottingham set the claims construction ("Markman") hearing to be held on February 1, 1998, with dispositive motions to be heard on April 1, 1998. On September 3, 1997, Defendants moved for summary judgment on the trade secret claim. The parties filed a Joint Claims Construction Statement on November 10, 1997. On March 3, 1999, Judge Edward W. Nottingham granted Defendants' Motion for Partial Summary Judgment on the trade secret claim.

On October 3, 2000, a Markman hearing where testimony was taken was held before Judge Edward W. Nottingham, but no ruling was ever made by Judge Nottingham.

On December 8, 2000, Defendants filed summary judgment motions on non-infringement and validity. On December 21, 2001, Judge Edward W. Nottingham ordered the case reassigned to Judge Walker D. Miller. On February 14, 2002, Judge Miller ordered the case reassigned to Judge Marcia S. Krieger. All the outstanding summary judgment motions were denied by Judge Krieger in the Court's Order of May 8, 2002.

After soliciting supplementary briefs but taking no testimony or oral argument on November 22, 2002, Judge Krieger issued a Memorandum Opinion and Order construing the asserted claims. The November 22 Order states on page 2 (*see* App. at 90) that it was based upon the following materials:

> 1. The parties' Joint Claim Construction Statement dated November 10, 19997 [sic];
>
> 2. The parties' opening briefs regarding claim construction;
>
> 3. The reporter's transcript of the Markman hearing conducted on October 3, 2000;
>
> 4. All briefs filed in support of and opposition to the parties' motions for summary judgment following the Markman hearing;
>
> 5. The exhibits admitted at the Markman hearing and submitted in support and opposition to the motions for summary judgment;
>
> 6. The parties' supplemental briefs in claim construction filed, at the Court's request, on May 31, 2002.

The District Court did not make any findings of fact either as expressly numbered findings of fact or implicitly, in accordance with its statement on page 6 (*see* App. at 94), "This issue is exclusively a question of law. *Markman v. Westview Instruments*, 517 U.S. 370 (1996)." On January 2, 2002, Defendants filed a Motion to Reconsider Defendants' Motion for Summary Judgment. On January 22, 2003, the Court granted Summary Judgment based upon the November 22, 2002 Order.

On February 18, 2003, Mr. Phillips filed a Notice of Appeal to the Court of Appeals for the Federal Circuit (Federal Circuit). In an opinion which was later withdrawn, a panel of the Federal Circuit affirmed both summary judgments in *Phillips v. AWH, Corp.*, 363 F.3d 1207 (Fed. Cir. 2004). Mr. Phillips applied for *en banc* rehearing, and the Federal Circuit withdrew the Opinion of the panel and granted *en banc* rehearing, *Phillips v. AWH, Corp.*, 376 F.3d 1382 (Fed. Cir. 2004). On *en banc* hearing the Federal Circuit reversed the summary judgment on the patent infringement claims and the claim construction of the November 22, 2002 Order and remanded for further proceeding in accordance with its opinion. It also affirmed the summary judgment on the trade secret claim on the basis of statute of limitations. *Phillips v. AWH, Corp.*, 415 F.3d 1303 (Fed. Cir. 2005).

The District Court on remand has docketed a trial date of February 28, 2006. Defendants filed a Renewed Motion for Summary Adjudication on the issue of patent validity on September 28, 2005. On November 9, 2005, Defendants filed a Petition for a Writ of Certiorari to the Court of Appeals for the Federal Circuit in the Supreme Court of the United States. On November 11, 2005, Defendants filed a Motion to Stay Proceedings pending Certiorari review in the District Court.

ARGUMENT AGAINST GRANTING PETITION

For the reasons discussed below, the Court should deny certiorari in any petition seeking review of the Federal Circuit's *de novo* review of claims interpretation decisions by a federal district court.